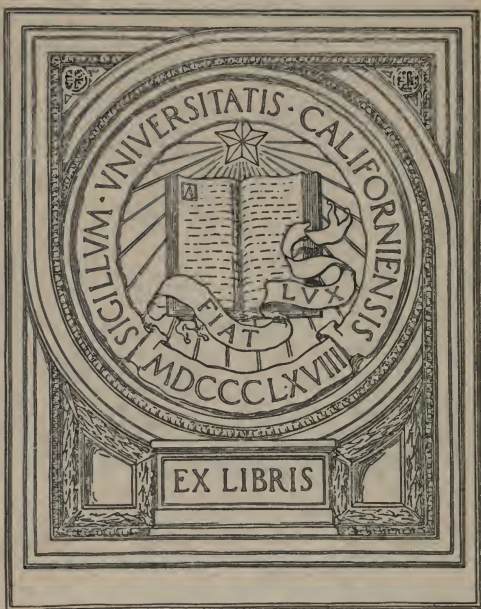
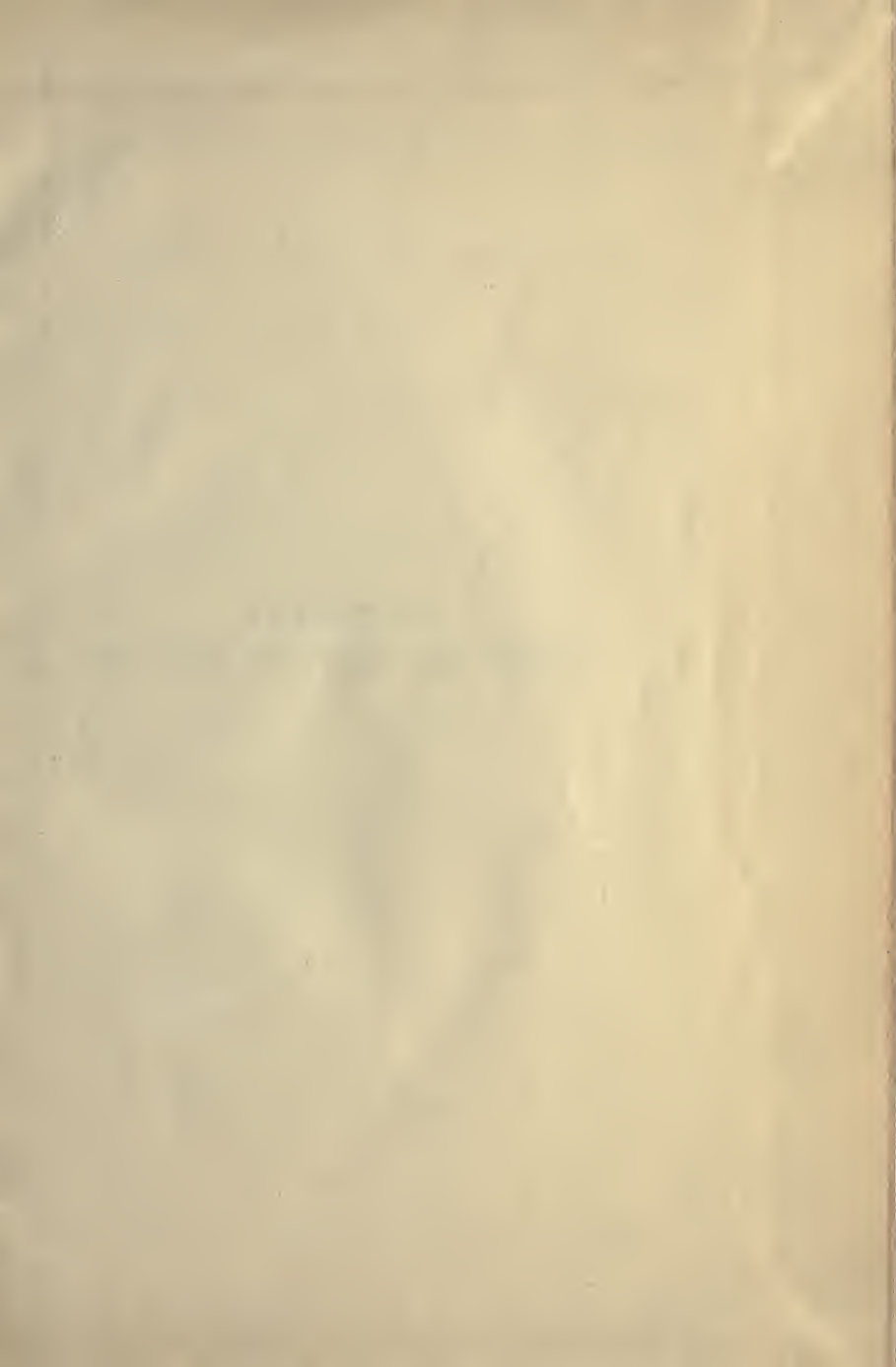




EX LIBRIS



LUCRETIUS
ON THE NATURE
OF THINGS

LUCRETIUS
ON THE NATURE OF THINGS

LUCRETII
ON THE NATURE
OF THINGS.

tan

*Translated from the Latin
into English Verse*

BY
SIR ROBERT ALLISON

AUTHOR OF 'FIVE PLAYS OF PLAUTUS'
'CICERO ON OLD AGE,' ETC.

With Introduction, Appendices, and Notes



LONDON
ARTHUR L. HUMPHREYS
187 PICCADILLY, W.
1919

LUCRETII
ON THE NATURE
OF THINGS

Translated from the Latin
by G. G. S. S.

SIR ROBERT ALLISON

Author of "The History of the
Philosophy of the Mind"

THE
LIBRARY OF
THE UNIVERSITY OF
CALIFORNIA

ARTHUR L. HUMPHREY
1811 UNIVERSITY BLVD.
LOS ANGELES, CALIF.
1911

PA 6483
E 2 A 5
1919

ERRATA.

Page	24	line	17	'protèst.'
"	31	"	6	'nourishèd.'
"	127	"	3	'compassèd.'
"	132	"	13	'ever' not 'even.'
"	133	last line	but 7	'is' for 'it.'
"	143	line	16	'flings' not 'fling's.'
"	145	"	4	'curvèd.'
"	152	"	16	'lie hid <i>therein</i> .'
"	163	"	23	' <i>Are</i> ' not 'is.'
"	167	"	7	full stop after 'is.'
"	167	"	8	comma after 'import.'
"	184	"	7	'the birth.'

418439

TABLE

1870-71	1	100	100	100
1871-72	2	100	100	100
1872-73	3	100	100	100
1873-74	4	100	100	100
1874-75	5	100	100	100
1875-76	6	100	100	100
1876-77	7	100	100	100
1877-78	8	100	100	100
1878-79	9	100	100	100
1879-80	10	100	100	100
1880-81	11	100	100	100
1881-82	12	100	100	100
1882-83	13	100	100	100
1883-84	14	100	100	100
1884-85	15	100	100	100
1885-86	16	100	100	100
1886-87	17	100	100	100
1887-88	18	100	100	100
1888-89	19	100	100	100
1889-90	20	100	100	100

INTRODUCTION

OF Titus Lucretius Carus, one of the world's great poets, we know hardly anything. One of the maxims which his beloved Master, Epicurus, impressed upon his followers was, 'Hide thyself, and pass through life unknown'; and so successfully has his pupil followed his advice, that no details of his life and works have come down to us. † Although the contemporary of Cicero and Catullus, we know nothing of him beyond the fact, which Mr. Monro thinks certain, that he was born at Rome in 99 B.C., and died at the age of forty-four in 55 B.C. † A story is told, on which Tennyson has founded his poem on Lucretius, how, after being driven mad by a love potion administered by a jealous woman, possibly his wife, he committed suicide in the forty-fourth year of his age. The story, originating as it does some three or four centuries later, and otherwise unsupported, may be dismissed. † On the same authority we are informed that Cicero edited his unfinished work. We have indeed a letter* from the great orator to his brother Quintus, written a few months after the poet's death, in which he says (I follow the rendering of Mr. Shuckburgh): 'The poems of Lucretius are, as you say, full of brilliant flashes of genius, yet very technical.' In

* Cf. Letter DXXX. Tyrrell's Edition.

INTRODUCTION

these words he is probably contrasting the fine poetical passages with the dry details of the long philosophical disquisitions with which the poet's work abounds, which have led some to assert that out of the twelve thousand lines, seven hundred only can be termed poetry. But there is nothing to lead us to suppose he edited it, and indeed it seems unlikely he should edit a work which in its main doctrines conflicts so strongly with his own on the existence of the Gods, and the fear of death. In one of his letters he calls Epicureanism 'the philosophy of the kitchen.' That Lucretius left his work unfinished and without his final revision is certain, and there are passages in the poem which seem to render it not impossible that he died by his own hand. Thus in his third book (iii. 941) he says:

'If life itself disgusts
Why seek to add to it, to lose again
And perish all in vain? Why not prefer
To make an end of life and labour too?'

And again (iii. 79):

'Oft again,
From fear of death, disgust of light and life
Seizes on men, and with a saddened heart
They do themselves to death.'

He was, we cannot doubt, disgusted with the world he saw around him, with the squalid passions and disputes unloosed on every side, and in his very first lines he calls upon the goddess of peace and love to supplicate the god of war to still the wild tumult of the surging storm, and

INTRODUCTION

once more to bring back rest and concord to the troubled world :

‘Oh, while he lies within thy fond embrace,
Pour low sweet words from thy soft lips, and ask
Peace, gentle peace for Rome.’*

But the peace so earnestly longed for came not, and Lucretius alone, apart, hangs like one of his own storm clouds—

‘Such are the clouds
Which oft we see to gather in the sky,
Blot the fair face of heaven, and as they go
Caress the air. Oft giant forces seem
To hurry past, their shadows leave behind’†—

over the troubled scenes of the closing years of the great republic with a profound sadness, a countenance of sorrow rather than of anger, which is the dominant note of his great poem. If ever there was a mind in earnest it was that of Lucretius. He saw around him the decay and dissolution of that old *régime* which had been so great a power in the ancient world—he felt something had gone wrong, and he endeavoured to apply a remedy to all the ills and troubles of mankind.

It is by a stroke of irony, that of Caius Memmius, to whom the poem is dedicated, and for whose instruction it would seem to have been written, we know far more than we do of the author of the work, who seems, however, to have been his friend and admirer. He was the son and nephew of well-known public men at Rome, and

* Cf. i. 38.

† Cf. iv. 136.

INTRODUCTION

himself took a considerable part in the political life of the State, having been tribune in 66 B.C. and prætor in 58 B.C. On this latter occasion he opposed the plans of Julius Cæsar, and it is in reference to this that we have an allusion in the poem when it says:

‘Nor yet can Memmius’ son
At such an hour be wanting to the state.’*

It was probably after his prætorship that he was assigned the province of Bithynia, whither he was accompanied by the poet Catullus, who gives a not very favourable account of his life and character. In 54 B.C. he was a candidate for the office of Consul, and being accused of bribery was exiled and afterwards lived at Athens. We have a letter* from Cicero to him, which goes to show that he was not a very ardent follower of Epicurus, though he perhaps adopted the more pleasant and easy-going of the great master’s tenets. According to Cicero’s letter he had secured a lease from the Areopagus, at Athens, of “some tumble-down house or other of Epicurus” (*nescio quid illud Epicuri parietinarum*) for the purpose of erecting on it a residence for himself. The Society of Epicureans objected. They said the buildings in question had been left to them in perpetuity, and requested the good services of Cicero to induce Memmius to surrender them. Their earnestness, he says, is rather laughable, but they are an innocent, simple-minded set, and we should indulge them, for their error, such as it is, is one of silliness, not knavery.

* Cf. i. 42. † Cf. Letter cxcix. Tyrrell’s Edition.

INTRODUCTION

We are not told the result of the application. Memmius, as we have said, was no very earnest Epicurean. He was, Cicero says elsewhere,* indolent and indifferent, and avoiding trouble not only in speaking, but in thinking too.

His name is connected with some unpleasant intrigues with women of note, and he would seem, on the whole, to have been unworthy of the friendship Lucretius lavished on him.

Lucretius' own work is as silent about himself as are other people's about him. But it is important we should remember the main events of the period in which he lived. It was a wild and lurid sky into which the sun of the great republic sank. The poet might have said, he did say, probably, with Hamlet:

'The world is out of joint; oh, cursed spite,
That ever I was born to set it right.'

From his tenth year onward riot and bloodshed were ever before his eyes. He saw Sylla drive Marius from Rome, the city hitherto inviolate besieged, the fighting in the streets: the return of Marius signalised again by slaughter lasting many days and nights: the subsequent triumph of Sylla, with its terrible battle at the Colline Gate and its fresh massacres. Six thousand victims were butchered almost before the Senate's eyes, and when they protested the conqueror replied, 'Be seated: 'tis nothing: some wretches undergoing the punishment they deserve.' For six months the proscriptions of the dictator lasted: each day produced its fresh list of victims, and

* Cf. Brutus, 247.

INTRODUCTION

no one knew how long he would be safe. There was no appeal to law. 'Talk not of laws,' said Sylla, 'to him who bears the sword.' No, there was no law, human or divine; religion was with impunity defied; or, what is yet more degrading, received a mocking reverence from those who made it a partaker in their crimes. At a later period, when he was thirty-five, he witnessed the suppression of the conspiracy of Catiline at the hands of Cicero, and the subsequent strangling of those incriminated, in the Tullianum—the dark underground prison whose smell, as Sallust tells us, was foul, and its look appalling.

It was still violence—always violence. Was law, men asked, never to resume its reign? Were the lives and properties of citizens to be ever at the mercy of the strong? A little later followed the squalid story of Clodius—his intrigue with Cæsar's wife, and his intrusion on the Vestal Virgins while engaged under her presidency in the new-fangled worship of the Bona Dea. For this offence he was acquitted by a jury bribed on his behalf—it may be with the consent of Cæsar himself, who, though he divorced his wife, did not wish to quarrel with one who might be useful in the ambitious schemes that were already in his view. To render the situation complete, Cæsar, though an avowed Atheist, was at the time Pontifex Maximus, and charged with the protection and maintenance of all religious rites and ceremonies. There was, indeed, a complete subversion of public and private morals.

When Lucretius was eighteen, Cicero, who was seven or eight years older, appeared as counsel in

INTRODUCTION

his first great case. A brief account of it may enable us to understand something of the condition of Society. S. Roscius, a wealthy citizen of Ameria, was murdered in the streets of Rome as he was returning home at night. The murderers were neighbours and distant kinsmen of his own. To cover their crimes they induced one Chrysogonus, a favourite freedman of Sylla's, to get Roscius' name inserted in the Proscription list. His property was then confiscated, and sold at a sham auction, where Chrysogonus bought it for an old song. But Roscius had an only son, who, if he could not be got out of the way, might be inconvenient to the conspirators. Accordingly an accusation was brought against him that he had himself murdered his father. The position of Chrysogonus, as the great dictator's favourite, made them think they could go any length. No advocate, they fancied, would dare to present himself in defence of Roscius. But the case was Cicero's opportunity. In his great speech he threw away all disguise, and gave voice to the feelings which were in the mind of every citizen, and vibrated in a thousand hearts. Sick of the reign of bloodshed and terror they had so long endured, it was as when Leon Gambetta, the famous French statesman, appeared in a great trial in the courts of Paris on behalf of M. Delescluze in 1868, and denounced the rulers of the Second Empire as frauds and impostors. Roscius was acquitted, and Rome, like Paris, discovered that another great orator and brave man had been found in the day of trial among her sons. Cicero, in his speech, declared that if some remedy for the condition of

INTRODUCTION

affairs could not be found, it would be better to go and live among the wild beasts than at Rome.

Such was the atmosphere surrounding Lucretius in his early years. He has been often termed a pessimist: but was it possible for any honest man in his surroundings to be aught else? To whom was he to turn? To the old Deities? Plautus had laughed them off the stage a century before, when, in his plays, he presented Jupiter himself engaged in a squalid intrigue with the wife of Amphitryon, and accounted for a dark morning by the fact that Apollo had too long tarried in his cups the night before. Other worships of foreign origin had been introduced, as that of the Magna Mater, the goddess mother described by Lucretius,* but these had only served as fresh inducements to immorality and lust. The old mythologies had ceased to command the belief, or influence the conduct of mankind. In despair men turned to the philosophies of Greece. Even there the lofty ideals of Plato were found too vague, the subtleties of Aristotle too hard and cold to satisfy men's craving for a guide. They became Epicureans or Stoics, as their bent inclined. Merivale, in his history of the Roman Empire, thus describes the condition of affairs (chapter xxii.): 'Rome overflowed with the impure spawn of superstition.' Conjurers, soothsayers, astrologers, and fortune-tellers filled every street, and introduced themselves into every home. The dreams of Cæsar and Pompeius were gravely related; Cicero collected the records of supernatural phenomena; Vatinius invoked the shades of the dead,

* Cf. ii. 600.

INTRODUCTION

and read, it was said, the will of the gods in the entrails of a murdered child. . . . The belief in portents and omens exercised an unconscious sway over thousands, who openly derided all spiritual existence, and professed atheists trembled in secret at the mysterious potency of magical incantations.'

As M. Arnold says :

'On that hard Pagan world disgust
And secret loathing fell ;
But weariness and sated lust
Made human life a hell.'

Lucretius, endeavouring to escape this hell, became the follower of Epicurus, and never had master a more devoted adherent. Epicurus, who was at once both prophet and physician, was born at Samos in 341 B.C., the son of a poor school-master, and established himself at Athens, where he lived a simple, temperate life—taught his scholars in the gardens which he left to them—and where, after long suffering from a painful disease heroically borne, he ultimately died. In the eyes of his young and glowing convert he was the greatest benefactor of mankind, who far surpassed all men in intellect: outshone them all as in the heavens the sun outshines the stars.* His enthusiasm for his master knows no limits, and no religious teacher could have sounded a more earnest and emphatic call to all men to find rest in the haven where he has discovered it himself. He approaches and describes his master's theories with all the burning energy of a deep conviction. There is no other instance of a man

* Cf. iii. 1041.

INTRODUCTION

of high genius so completely possessed and dominated by another mind.

And what was this teaching of Epicurus? It is easy to represent it as having pleasure and pleasure only as its first objective—and possibly some of its more easy-going adherents, like Memmius himself, were drawn to it in this way. Probably no teacher has been more monstrously calumniated than Epicurus. For centuries he was believed to be a sensualist, and to have preached such doctrine to his followers. But such was certainly not the faith that attracted Lucretius' eager soul. There was nothing of the Epicure in its worse and modern sense about the master he adored. I am not sure that this atheistic Epicure is not in a true sense the most religious of all poets. Seneca,* himself a Stoic, said of the creed: 'For myself I think, and venture in opposition to the opinion of many to say, that the moral teaching of Epicurus is sane and right and even austere for those who rightly apprehend it: I do not venture to say, as many of our school do, that it is a school of debauchery: it does not deserve to be so described.' And Cicero says of Epicurus himself: 'What crowds of chosen friends he gathered round him: what close affection to their master they displayed!'+ And in his will Epicurus bade his heirs to defray the expense of gathering together at stated times the philosophers his friends 'in honour of his memory.' How gladly we can imagine Lucretius joining in the homage thus paid. What troubled and saddened him was that the discredited Deities

* *Cf. De vitâ beatâ*, 13.

† *Cf. De Fin.* i. 20.

INTRODUCTION

was still paraded by poets and priests as the creators of the world, and the maintainers of its fabric, still able to affect for good or ill the destiny of man in this and another existence to follow after death. Even long after Lucretius' day, when Rome fell before the Goths, men were inclined to believe that the disaster was to be ascribed to the anger felt by the old Roman deities at the neglect of their worship and their rites: and St. Augustine argues in reply that it was not the rise of Christianity, but the views of Paganism that brought about the fall.

But what chiefly attracted the keen and ever-inquiring soul of Lucretius, thinking to escape from the haunting fear of Gods and the threatened torments of the future, in the teaching of Epicurus, was his theory of the nature and origin of the world—the Atomic theory, as it is termed. Borrowed in the main from Democritus, a Greek, who lived a hundred years before him, it taught that everything was formed of indivisible particles or atoms, eternal and unchangeable, and that these atoms by various combinations in infinite time, with the void in which they move, formed the universe, the *summa rerum*, we see to-day. We must remember that it was a theory entertained in whole or part by Bacon, Descartes, Hobbes, Locke, Boyle, and Dalton. It was indeed a forbidding subject for a poet to unfold—a 'lourd fardeau,' as M. Martha terms it, the heaviest ever laid on a poetic genius to accomplish. We recognise this all the more when we compare it with some of the writings of Epicurus himself, which were discovered at Herculaneum in 1752. But a

INTRODUCTION

God, a very God, he was in the eyes of his young and ardent disciple, and he determines to throw round his arid theories the Muse's charm. The walls of the great world part asunder before his eyes, and the poet sees the working of things throughout the void as they move along, ever making and unmaking fresh figures in their æonian dance. He had, as he reminds us, almost a new language to create:

‘The rise

And long fall of the hexameter’

to perfect for the task. But no pains were to be spared: he speaks of the

‘Toilsome path to watch the long nights through,
Seeking the words by which, and in what verse
I may at length shed round your mind a light
Which will display to you the hidden things.’*

And again, speaking of what men think of in their sleep, he says:

‘While we pursue our task, and seek to learn
What is the nature of the world around;
When found, relate it in our native tongue.’†

But dry and arid as the subject was he clothes it with poetic charm, and becomes as interested in the motion of his atoms, as they clash, rebound, unite and separate, as ever was Homer in the battles of the heroes he commemorates. It is touching indeed to watch the young aristocrat sitting calmly down amid the vices and corruptions of the day, and painfully devoting himself

* i. 142.

† iv. 966.

INTRODUCTION

to rousing the men of his time to a higher and nobler conception of the world they saw around them, and their position in it. And first as to its origin. According to Epicurus, as his theory is unfolded in the first and second books of the poem, the world was not the work of Gods :

‘Ah, when they think the Gods
Made all these things for man, they seem to me
To have wandered very far from reason’s path.’*

Not that Epicurus rejected the idea of Gods altogether: he worshipped the Gods, but not in the ordinary fashion. ‘Not he,’ he said, ‘is godless, who rejects the Gods of the crowd, but rather he who accepts them.’ The Gods to him were eternal and immortal beings, whose blessedness excluded every thought of care or occupation of any kind. They were to live, as Tennyson describes them, in

‘The lucid interspace of world and world,
Where never creeps a cloud or moves a wind,
Nor ever falls the least white star of snow,
Nor ever lowest roll of thunder moans,
Nor sound of human sorrow mounts to mar
The sacred everlasting calm.’

They are to be examples to, but not the creators or guides of man. Epicurus worshipped in the temples, as Lucretius himself speaks of doing. But they never interfered with the course of nature. The only Deity worthy of worship was Nature herself, ‘*Natura gubernans*,’ as Lucretius calls it, whose laws must be followed and obeyed. Some

* ii. 165.

INTRODUCTION

have seen in this *Natura gubernans* a sort of adumbration of the Deity or great First Cause on the part of Lucretius. As Bacon says in his Essay on Atheism, 'God it is certain worketh nothing in Nature but by Second Causes.' And so, under the direction of this *Natura gubernans*, according to our poet, the world was formed by natural forces working in illimitable time. Infinite atoms falling through infinite space in innumerable ways, like the snowflakes in a storm, or the motes that you see playing in the sunbeams in the corner of a room,

'Trying all motions and all unions too,
They reached at last to dispositions such
As now has formed this universe of ours,
By which it is preserved through the great years.'*

And again :

'So the seeds
To-day have the same motion, that they had
In days gone by, and will have to the end :
What was begot will be begotten still
By the same law : will be, will grow and wax
As long as Nature's laws permit to each.'†

And yet in spite of the laws which guide them—the *Natura* or *fortuna gubernans* under which they work, it was still felt that man's will was free, that he was his own master for good or ill : and so there is, as the poet explains, a power of declination in the motes and atoms, a certain swerve which enables them to accommodate themselves to the fact of which our senses in-

* i. 1027.

† ii. 297.

INTRODUCTION

form us (and the senses, according to Epicurus and as Lucretius emphatically lays down, are the court of final appeal), that man is a free agent, possessed of power that has been arrested from the fates, and that, as the poet says :

‘Nothing hinders, why we should not lead
A life in all things worthy of the Gods.’*

We are not the slaves of circumstance: we are the authors of our own well-being and salvation, as we are responsible for our undoing and our fall. These atoms move in a void, which is the other component part of the universe, and the two great laws laid down are that nothing comes from nothing, and that nothing is ever dissolved into nothing. And then the mind and the soul too, to which Lucretius devotes his third book, they too are formed of atoms lighter and more rare, for nothing is more nimble than the mind, yet, like the body, dying when it dies. The poet gives some twenty or more reasons why the mind and soul are mortal like the body, and then sums up in the famous pæan at the end of the book:

‘So death is nought to us, no, not a jot,
a shout as triumphal, though for a different reason as St. Paul’s when he cries, ‘O death, where is thy sting?’ Mr. Tyrrell in his work on Latin literature parallels it with Walt Whitman when he cries:

‘Praise, praise, praise
For the sure-enwinding arms of cool-enfolding
death.’

* iii. 326.

INTRODUCTION

And again :

‘I joyously sing the dead,
Lost in the loving floating ocean,
Lav’d in the flood of thy bliss, O Death.’

And we must remember in considering his views that Lucretius wrote a century before the Gospel brought life and immortality to light: that the immortality of the soul was then no currently accepted doctrine: Julius Cæsar denied it openly before the Senate at the very time he was Pontifex Maximus, and even in the Psalms, the world’s manual of devotion, we find passages which leave the impression of a final triumph of death, and the complete annihilation of consciousness. Thus in Psalm cxv. 17: ‘The dead praise not the Lord, neither any that go down into silence.’ Then again in Psalm cxlvi. 4: ‘His breath goeth forth, he returneth to his earth: in that very day his thoughts perish.’ We all know how difficult it is even to-day

‘To make our doubts remove,
The gloomy doubts that rise,
And view the Canaan that we love
With unobscured eyes.’

And so we need not be astonished at Lucretius in the circumstances in which he wrote arriving at the conclusion at which he did. And there is this further to be said: in the world of his day the lower regions assigned to the dead were but an enlarged tomb, where they remained in the black darkness of eternal night. Cicero tells us that the fear of death weighed on the ancient world like the famous rock on the unfortunate

INTRODUCTION

Tantalus. Virgil has painted it for us in his fourth Georgic:—

‘There, startled by his song, wan spectres flocked
Forth from the utmost deeps of Erebus—
Dim phantoms that had lost the light of day:
Matrons and husbands, and the forms long dead
Of high-souled heroes, boys, and spouseless girls,
And well-loved youths, who in their parents’ sight
Were laid to rest upon untimely pyres;
All these were they whom black Cocytus binds
With darkling ooze, with fringe of loathly reeds,
With sleepy waves that lap the loveless shore:
They whom abhorrent Styx for ever chains,
Girt with the ninefold fetters of his flood.’*

Virgil, indeed, subsequently, in a similar passage in his sixth *Æneid*, added the Elysian fields to this somewhat unsavoury district, but the way to them was long, the escape to them uncertain, and arbitrarily conferred. Lucretius’ conclusion—and it is a very practical one—is that hell is here among us: that the veriest hell is that which fools make of their own lives.

Having thus established that the mind and soul die with the body to which they have been attached in life, if this is so, if they really perish, how is it that we have a belief in ghosts and images of the dead reappearing to us? His answer in the fourth book deals with the whole question of sensation—sight, hearing, touch, and smell. How do they all arise? His explanation is that all objects are incessantly throwing off thin films or images of themselves, which strike

* *Georgics*, iv. 467, Lord Burghelere’s translation.

INTRODUCTION

our senses, and so give rise by the impact to the sensations which we feel on eye, or ear, or tongue, as the case may be. Thought is explained in a like way, and so are dreams. The book concludes with a disquisition on love, introduced by the images of the loved one, so frequently occurring to the lover's mind, and the great dangers it involves. And with a scathing satire on the lover's perils the book closes.

The fifth book shows how this infinite concourse of atoms described in the earlier part of the poem has in the end produced the world, and life, and human society as we see it to-day. It is not, he affirms again, the work of gods—it has been brought into existence by natural causes, by the motions and contacts of the atoms, the heavier ones gradually sinking down to form the earth, the lighter rising to produce the sun and moon and stars. It has been termed the most magnificent account of the progress of the human race that ever proceeded from mortal pen. The main cause of progress, as he indicates, has been the want men feel of this or that for comfort and convenience—the experience which teaches them gradually to satisfy their wants, and finally the reason which co-ordinates the various experiences, and, as he says,

‘brings everything

To man's attention ; reason raises them
Into the light of day : for things must grow
One on another clearer and more bright
In arts until they've reached their topmost
height.*

* Cf. v. 1445.

INTRODUCTION

Man in his early stages, though naked and unarmed, was strong and vigorous; he had to fight for bare existence, lived on such fruit as earth produced, and waged a continual struggle against wild beasts and other foes. Then discoveries mark his gradual advance: he learns to clothe himself, to make himself a hut to dwell in, and last, and most important, to light a fire for warmth. Then by degrees their habits become less wild: men and women live together in one family and have children, the weak are protected, law and custom come into force, civilisation has begun. It is the Contract Social of Rousseau, who followed Lucretius closely in his *Discours sur l'origine de l'inégalité*. Then language is invented. The discovery of fire and its use for melting metals gives rise to industries, men till the soil, the various arts and sciences follow in their turn: they begin to dwell in towns, and ships sail upon the sea. Lucretius was clearly one of the first to trace the progress of the human race, a fact for which perhaps he has not received all the credit he deserves. Virgil recognised his value when he sang of him:

‘He sung the secret seeds of Nature’s frame—
How seas, and earth, and air, and active flame
Fell through the mighty void, and in their fall
Were blindly gathered in this goodly ball.
The tender soil then stiffening by degrees
Shut from the bounding earth the bounding
seas.

Then earth and ocean various forms disclose,
And a new sun to a new world arose.

INTRODUCTION

And mists condensed to cloud obscure the sky :
And clouds dissolved the thirsty ground supply.
The rising trees the lofty mountains grace,
The lofty mountains feed the savage race,
Yet few, and strangers in the unpeopled place.
From hence the birth of man the song pursued,
And how the world was lost and how renewed.*

In the sixth book he deals, after a third eulogium of Epicurus, with various other phenomena hitherto unnoticed, alleging, as he has done before, several possible causes which may account for them, though admitting that he is entirely in doubt which may be the true explanation. Then he proceeds to deal with the theory and history of disease, and concludes with a long and detailed account of the plague at Athens, in which he closely follows the account of Thucydides. The work is evidently unfinished, and was interrupted by his death.

Such is the poem of Lucretius. Much of his science no doubt is false, and even palpably absurd, as when he states the sun is no larger than it seems to us to be; but after all he is in very early days a keen inquirer, a genuine seeker after truth. His errors do not detract from his merits. They were such as in his day no one could avoid; his genius is his own. Amid the vices and corruptions of his day, he endeavoured to turn men's thoughts to higher and sterner purposes: to endeavour to understand the nature of the world around them, and the place they ought to fill in it. It was a novel path, and he made great mistakes, but yet the germs of much

* Virgil, *Eclogues*, vi. 31.

INTRODUCTION

in modern science may be discovered in his lines. He told before Lamarck of the successive efforts by which the elements have sought to gather and effect a stable combination; before Darwin of the ideas of natural selection and evolution, of the species, once existing, which have disappeared because they had not strength, or cunning, or agility to protect them in the stern battle of life; before Spencer of the development of worlds like individuals, and destined like them to decay and death. 'After all,' as Dr. Masson says, 'there is only one Lucretius, and it has taxed all my powers, and demands far higher, to make him what he is—the comrade of all fighters against superstition, the ally of the man of science, the poet who so loved our earth and every changing feature of her face, in whom sadness and high fervour are so strangely blended, who felt for children terror-stricken in the dark, and who set forth exulting in his bright new-found weapons, with his heart on fire, to deliver his fellows from care and fear.'* He is the supreme example of the scientific and imaginative spirit combined and reacting on each other; a close observer of nature, he uses his imagination to enlarge his view and widen his outlook, and has so been able to arrive at, and anticipate, many of the discoveries of modern scientists. Speculation and imagination are not incompatible: the latter connects and amplifies the former. The vision of the mind authoritatively supplements the vision of the eye. Dr. Tyndall, in his lecture at Belfast, spoke of his strong scientific imagination. And then, beside,

* Dr. Masson, *Lucretius, Epicurean and Poet*, Preface, page x.

INTRODUCTION

there is the ethical side of his teaching, which must not be overlooked. 'Atheist and Epicurean if you like, he is one of the most religious of all poets. 'Unless the heart is pure,' what dangers lie round us on every side. 'The narrow path' along which we have to walk, so familiar to us in Holy Writ, is pointed out; the vices of avarice, and luxury, and illicit indulgence are scourged with a heavy hand; the height to which a man can soar, the depth to which he may fall, the contrast between the simple and the splendid life, the folly of the ambition and feverish unrest of those around him: these are his themes, all touched with a master's skill. Wine is never mentioned but to be condemned, and even when he paints the pleasant picnic

'Beside the flowing stream beneath the trees,' there is no mention of the Falernian, which Horace would undoubtedly have introduced. Mr. Myers says: 'No voice like his has ever proclaimed the nothingness of momentary man; no prophet so convincing has ever thundered in our ears the appalling gospel of Death.' In his case, as in that of Juvenal, 'facit indignatio versum.'

His close observation and love of nature have caused him to be likened to Wordsworth among our poets, and Wordsworth has many imitations of him. The sacrifice of Iphigenia,* the procession of Cybele,† the succession of the seasons,‡ are all described with a closeness and accuracy that marks the master-hand. Among other passages, the cow wandering the meadows § in search of its calf, the

* i. 84.

† ii. 600.

‡ v. 737.

§ ii. 355.

INTRODUCTION

sheep grazing on the distant hill* that seem a single spot of white, the dance of the motes in the sunbeams in the room,† the sea-beach with all its varied shells,‡ the fantastic shapes the clouds assume,§ the wearing of the streets by the passers' feet, and of the ring upon your hand,|| the wet clothes drying in the sunshine on the beach¶ the scythe-bearing chariots covered with gore, the limbs of stricken soldiers on the field endeavouring still to move,** these are some of the illustrations that are all familiar to those who read him, purple passages which none forget.

There are not many allusions to Lucretius in the works of his contemporaries; it may be his earnestness and lofty teaching were uncongenial amid the sea of filth and depravity on which his lot was cast. But his influence was on them all the same. There is another passage in Virgil's *Georgics* where he manifestly alludes to him:

‘For happy is the sage whose master-mind
Grasps the dim secrets of the universe:
Who tramples underfoot all fear of death,
All dread of an inexorable doom,
And the loud roar of greedy Acheron.’††

And often, both in thought and language, Virgil follows in his footsteps. There were some, Tacitus says, who preferred him to the later poet. Ovid is more outspoken:

‘Carmina sublimis tunc sunt peritura Lucreti,
Exitio terras cum dabit una dies.’††

* ii. 317. † ii. 114. ‡ ii. 374. § iv. 136. || i. 312.

¶ i. 305; vi. 470. ** iii. 642.

†† Virgil, *Georgics*, ii. 490, Lord Burghclere's translation.

‡‡ Cf. Ovid, *Amor.* i. 15. 23.

INTRODUCTION

Horace seems to admit he was once his pupil, though, startled by thunder in a clear sky, he laid his epicureanism aside.* But later on the fact that he was an atheist no doubt militated against his popularity, so much so that in the seventh century his poem's existence is said to have hung on the slender thread of a single manuscript, which has now disappeared. He was unknown to Dante and the Middle Ages, though Dante places in his Hell Epicurus and

‘all his followers

Who with the body make the spirit die.’†

But in the fifteenth century a copy of the original manuscript came to light, and the first edition followed. There was quick recognition of his value. Lambinus, a competent critic, terms him ‘elegantissimus et purissimus, idemque gravissimus atque ornatissimus’ of all the Latin poets. Lucy Hutchinson, the wife of the Puritan colonel, and John Evelyn, the Royalist, were alike attracted, and each published a translation of the poem. Old Montaigne, in his *Essays*, quotes him continually, and when he reads a fine passage from Lucretius, is in doubt if he does not prefer him to Virgil. Milton has many phrases that he borrowed from him. Dryden says his distinguishing character is ‘a certain kind of noble pride and positive assertion of his opinions, and that sufficiently warms.’ From this same fiery temper proceeds the loftiness of his expressions and the perpetual torrent of his verse. Shakespeare knew

* Cf. Horace, *Odes*, i. 34; *Satires*, i. 5. 102.

† Cf. Dante, *Inferno*, x. 15.

INTRODUCTION

him, probably through Montaigne. He was the chosen companion of Frederick the Great in his arduous campaigns, and writing to his secretary he says: 'Before going to bed, I shall read my book of consolation, the third book of Lucretius. As you know, this is my favourite reading in days of care and sorrow. This man helps me.' Miss Berry writes to Horace Walpole: 'Listen indiscriminately to those who praise Lucretius. You will plunge with the writer into a sea of pure delight if you have the poetic spirit. His science is worth nothing, but his poetry is divine: Virgil is mere prettiness.' Victor Hugo tells how, at Romorantin, in a poor cottage which he had, he first came on the marvellous book, and read on seeing nothing, hearing nothing from dawn to sunset. His book, says Goethe, is one of the most remarkable documents in the world. Macaulay says that 'in energy, perspicuity, variety of illustration, knowledge of life and manners, talent for description, sense of the beauty of the external world, and elevation and dignity of moral feeling, he had hardly ever an equal.' Of Mrs. Browning's verdict there is no doubt:

'Lucretius—nobler than his mood:
Who dropped his plummet down the broad
Deep universe, and said, "No God,"
Finding no bottom: he denied
Divinely the divine, and died
Chief poet on the Tiber-side.'

Tennyson showed his love of him by his frequent imitations, and by his poem on him, though he chose an unhappy and unsupported incident in

INTRODUCTION

his life for his theme. And last of all, so fine a judge as Lord Morley has devoted no less than ten pages of his recently published *Recollections* to memories of a poet who he says is one of the great figures in literature. When he is praised by these, he need not fear to be condemned by others.

The version used for this translation is that of Munro, in his second and revised edition of 1866. Variations from it are noted.

August 19th, 1918.

Must be a used in nature
for movement to be possible

*A series of
lenses.
1. Nothing can do
from nothing.
2. 2. 10*

T. LUCRETIUS CARUS
ON THE NATURE OF THINGS

BOOK I.

i., 1-6.

nvocation
to Venus
as the
generating
power of
Nature.

PARENT of Æneas' line, beloved of Gods*
And men alike, kind Venus, who beneath
The gliding stars of heaven, flying still,
Fillest with joy the Ocean's sail-clad waves
And the fruit-bearing Earth: since 'tis by thee
Each living thing has life, and living hails
The Sun's effulgent beams: thee, Goddess, thee
The winds do fly, and thee the clouds of heaven,

* Spenser has translated the opening lines (*Faerie Queen*, book iv., canto x., vv. 44-47):

44.

'Great Venus, Queen of beauty and of grace,
The joy of gods and men, that under skie
Doest fayrest shine, and most adorn thy place;
That with thy smyling looke doest pacifie
The raging seas, and makst the stormes to flie;
Thee, Goddess, thee the windes, the clouds do feare;
And when thou spredst thy mantle forth on hie,
The waters play and pleasant landes appeare,
And heavens laugh, and al the world shows joyous cheare.

45.

'Then doth the dædale Earth throw forth to thee,
Out of her fruitful lap abundant flowres:
And thee all living wights, soone as they see
The spring breake forth out of his lustie bowres,
Then all doe learne to play the paramours:
First do the merry birds, thy pretty pages,
Privily pricked with very lustfull powres,
Chirp loud to thee out of their leavy cages
And thee their mother call to cool their kindly rages.

T. LUCRETIUS CARUS

And thy approach : the dædal Earth to thee
Offers sweet flowers, the plains of Ocean smile,
And heaven at peace with diffused splendour
shines.

For thee, when now the face of spring is come,
And gentle breezes loosed have leave to blow,
The birds of air acclaim thee on thy way,
Their hearts all smitten with the power of thee.
Then leap the wild herds in the pastures gay,
And breast the swirling streams : so by thy charms
Enthralled each follows wheresoe'er thou wilt.
Thus o'er the seas and hills and raging floods,
The leafy homes of birds, the emerald plains,
In breasts of all implanting fond desire,
Thy work it is each race is still renewed,
Each following on according to his kind,

Since then through Nature thus thou rul'st alone
And without thee naught sees the light of day,

46.

'Then doe the salvage beasts begin to play
Their pleasant frisks, and loath their wanted food :
The Lyons rore ; the tygers loudly bray,
The raging bulls rebellow through the wood
And breaking forth dare tempt the deepest flood,
To come when thou doest draw them with desire :
So all things else that nourish vitall blood,
Soone as with fury thou doest them inspire,
In generation seek to quench their inward fire.

47.

'So all the world by thee at first was made
And dayly yet thou doest the same repayre :
Ne ought on earth that merry is and glad,
Ne ought on earth that lovely is and fayre,
But thou the same for pleasure didst repayre :
Thou art the root of all that joyous is :
Great god of men and women, queene of th' ayre,
Mother of laughter and wel-spring of blisse,
O grant that of my love at last I may not misse.'

ON THE NATURE OF THINGS

i., 23-43.

Nor aught grows bright and lovely, thee I seek
To be the helper of my song, wherein
To Memmius' son, our friend, I would unfold
The nature of the world: to him whom thou
Hast ever wished to excel in all that's good.
Therefore the more, O Goddess, grant my words
Unending charm: and see thou that the while
O'er seas and lands the cruel works of war
Are lulled to rest: for thou alone hast power
To glad men's hearts with sweet tranquillity.
Thou on whose breast, consumed with eager love
Mars* throws himself, who rules with powerful
sway

O'er war's wild works, and then with gaze upturned
All open-mouthed, with shapely neck flung back,
Feeds his love-greedy eyes on thy dear face,†
While all his soul hangs quivering on thy lips.
Oh, while he lies within thy fond embrace,‡
With all thy godlike charms around him shed,
Pour low sweet words from thy soft lips, and ask
Peace, gentle peace for Rome; in these sad days
We cannot enter on our task with mind
All undisturbed, nor yet can Memmius' son
At such an hour be wanting to the State.

* Cf. Byron (*Childe Harold*, iv. 51):

'In all thy perfect Goddess-ship, where lies
Before thee thy own vanquished Lord of War,
And gazing in thy face, as toward a star,
Laid on thy lap his eyes to thee upturn
Feeding on thy sweet cheek!'

† Cf. Shakespeare (*Measure for Measure*, ii. 2. 179):

'And feast upon her eyes.'

‡ Cf. Tennyson (*Lucretius*):

'I cry to thee
To kiss thy Mavors, roll thy tender arms
Round him, and keep him from the lust of blood,
That makes a steaming slaughter-house of Rome.'

T. LUCRETIVS CARUS

i., 50-79.

Appeal to
Memmius.

But further, Memmius, hear me while I sing,
With ears unoccupied and mind alert,
And lay thy cares aside, lest what I bring
With careful study fall on ears distraught,
Incur contempt, ere it is full received.
For to thee I would tell how things began,
And what the law of heaven, who the gods,
Whence Nature all creates, sustains, matures,
And then at last dissolves: what we are wont
Matter and germs and seeds in turn to call,
And primal bodies, being the source of all.

Epicurus
and his
work.

When human life lay grovelling on the ground,
A piteous sight, by superstition crushed,
Who lifting high her head from heaven, looked
down

With luring look, then first a man of Greece
Dared lift his eyes, and dared to face the foe;
Him not the fables of the gods above,
Nor lightning's flash, nor heaven with threats
could stay;

But all the more he set his eager soul,
To burst through Nature's portals closely barred,
And his keen soul prevailed, and far beyond
The flaming ramparts of the world did pierce,*
With mind and soul surveyed the vast expanse,
Whence crowned with victory he can teach to us
What may, or may not be, what power to each
Is given, and its bounds so deeply set:
So superstition dying in its turn,
And trampled underneath the foot of men;
No more alarms, and we are heaven's peers.

* Cf. Gray, *Progress of Poesy* has:

'He passed the flaming bounds of place and time.'

ON THE NATURE OF THINGS

i., 80-101.

Religion
has been
sometimes
in the
wrong, as in
the case of
Iphianassa.

And here I fear, lest you perchance should deem
That you are asked, with reason as your guide,
To enter as it were a school of sin,
And tread in paths that lead to impiety:
More oft, be sure, to foul and evil deeds
Has superstition led*: in Aulis once
The chosen leader of the Danaids' host
Foully defiled with Iphianassa's blood
The altar of the cross-road maid: what time
The sacred fillet that confined her hair,
Poured it in equal tresses down her cheeks,
And there she saw before the altar stand
Her sorrowing father, and close by his side
The ministering priests with knives concealed,
And all the citizens with tearful eyes.
Struck dumb with fear, upon her knees she fell,
Nor at that hour it profited at all
That first through her he enjoyed a father's name.
For she all full of fear was dragged by men
Before the altar, not with solemn rites,
To be led out with the hymeneal song,
But virgin still, in the very hour to wed,
Chaste, but unchastely by her father's hand
To fall a victim, that his fleet might have
A safe and prosperous voyage to its port.
To such dread deeds did superstition lead.†

* The story of Iphigeneia, who was sacrificed at Aulis to procure a prosperous voyage for her father Agamemnon's fleet, is the subject of Euripides' play, the *Iphigineia in Aulis*. It was done at the bidding of the prophet Calchas. Cf. Euripides' *Iphigeneia in Aulide*, 1100 *ad fin.* Cf. also Æschylus, *Agamemnon*, 198-248. The cross-road maid was Artemis or Diana, whose altars were erected at cross-roads.

X † This famous line represents the whole aim and object of Lucretius in his poem—to rid men's minds of the foolish dread of the Gods and their dealings with mankind, which was the environ-

T. LUCRETIVS CARVS

i., 102-123.

Problems
to be dealt
with.

Aye, you yourself some day, perhaps o'ercome
By priests' alarming words, will fall away.

For even now how many dreams they paint
Such as the settled reasoning of your life
Might well o'erturn, and all your future fate
With terror darken. Not without due cause.

For if men knew there was a certain end
Of all their woes, it would be in their power
Priests' threats and terrors boldly to defy:

But now there is no power to say them nay,
Since after death eternal punishment
Must be the dreaded doom. For no one knows
What is the nature of the soul of man,

Whether 'tis born, or rather at our birth
Finds entrance to our body, and at death
Dies with us too, or visits then the shades
And vasty caves wherein the dead abide,
Or by God's grace inhabits other forms
Of beasts, as Ennius,* our poet, sang,

Who first brought down from pleasant Helicon
A crown of leaves unfading, whose fair fame
Amid the Italian race will never die.

And yet ev'n Ennius in eternal verse
Tells us beside of Acherontic realms,
Where neither souls, nor bodies, can survive,
But shadows with a wondrous paleness girt,

ment by which they were surrounded. Bacon, in his Essay on Unity in Religion, says: 'What would he (Lucretius) have said if he had known of the massacre in France (St. Bartholomew's) or the powder treason in England? He would have been seven times more epicure and atheist than he was.' Cicero, speaking of the self-slaughter of the Decii in *De Nat. Deorum*, iii. 6, says: 'Quæ fuit tanta deorum iniquitas, ut placari populo Romano non possunt, nisi tales viri occidissent.'

* Ennius, the first of the great Latin poets, who died 196 B.C., the introducer of the hexameter.

ON THE NATURE OF THINGS

L, 124-152.

From whence, he tells us, rose before his gaze
Immortal Homer's shade, with weeping eyes
In words unfolding all the course of things.
And therefore we must give account of all
That is above, the course of sun and moon,
How 'tis arranged, and by what potency
The things that are in earth are brought about :
And chiefly by intelligence must find,
Whence comes the Soul, the nature of the mind,
And what it is that makes our hearts to quail
When wakeful at the bidding of disease,
Or plunged in sleep, so that we seem to see
And hear close to us those who long are dead,
And whom earth holds locked in its close embrace.

Difficulty
of
expressing
in the
Latin
language.

Nor do I fail to see how hard it is,
To tell in Latin verse the obscure truths
Unfolded by the Greeks, since many things
Must be described in words not heard before,
Because the things are new, our language poor.
But yet your character, the hoped-for joy
Of your sweet friendship, lead me to attempt
The toilsome path, to watch the long nights
through

Seeking the words by which, and in what verse
I may at length shed round your mind a light
Which will display to you the hidden things.

This terror then, these shadows on the mind
"Tis not the radiant sun, nor day's bright beams
Can them expel, but nature's face and plan.
And first let this our great beginning be
That naught from naught by power Divine has
come.

But yet in mortals such a fear doth dwell,
Because in earth and heaven they can see

The first
law is that
nothing
comes
from
nothing.

T. LUCRETIUS CARUS

l., 153-176.

Much that they cannot understand at all
On any plan they know, and so they think
That all is due to influence divine.

Wherefore when once we see that naught can come
Of naught, we shall more clearly ascertain
That which we wish to know, whence all things
come,

And how without the Gods they can arise.

Proof of
his
first law.

For if from nothing things we see were made,
All things could come from all things, and no
seed

Would be required. Man from the sea would rise,
The scaly fishes from the earth come forth,
Birds dart from heaven, horned beasts and herds,
And all wild animals, born here or there,
Would hold alike the forest and the field.
Nor would the same fruit on the same tree still
Appear, but they from time to time would
change,

stop And all bear everything. Forsooth indeed
If each had not particular seeds assigned,
How could there be a mother fixed and sure
For each in turn? But since from certain seeds
Things are produced, then each thing takes its
birth

And issues forth into the light of day,
From that wherein its primal matter lies;
And all things cannot be from all things made,
Because in certain things, and them alone,
The power which can create anew resides.
Again, why do we see the roses blow,
When spring is come, the corn in summer's heat,
The vines in autumn clustering o'er the earth,
If not because when the fixed seeds of things

ON THE NATURE OF THINGS

L., 177-203.

Have come together, what is born appears,
While favouring seasons smile, and the live earth
In safety rears the tender plants to light?
But if they come from nothing, then be sure
They would, or here, or there spring suddenly,
One knows not where, at unpropitious times,
Since there would be no primal elements,
Which might at unfit season be held back
From generating contact. Nor if things
Could come from nothing, would there need to be
An interval of time for their increase.

The puny babe would straight become a youth,
And trees full-blown leap sudden from the earth.
But none of these things comes to pass, because
All grow by slow degrees from certain seeds,
As fitting is, and each preserves its kind,
So you can tell how each grows great and strong
From its own substance. Add this further fact
That without timely showers throughout the
year,

Earth could not its glad harvests e'er produce,
Nor without food could living things avail
To increase their kind and multiply their life:
So that the rather you might well suppose
That many things of many elements
Are formed, as many letters go to form
A word, than that without beginnings aught
Can e'er exist, or why should Nature not
Breed men so large that on their feet alone
The ocean they might ford, and with their
hands

Tear mighty mountains down, and over pass
In length of years long ages of mankind,
If 'twere not certain elements are fixed,

T. LUCRETII CARUS

i., 204-231.

X From which things are begot, and you can tell
What will arise from each? Therefore 'tis clear
Nothing from nothing, that is Nature's law
Because there must be seed from which they
spring,

And to the gentle breezes be dispersed.
And lastly, since we see that cultured land
Is better than uncultured, and does yield
More produce to our hands, we recognise
There are in earth first elements of things,
Which we by turning o'er the fruitful glebe,
And breaking up the soil call into play:
If such there were not, then without our toil,
Of their own will much better things would grow.

The second
law, that
nothing is
resolved
into
nothing.

Indestruc-
tibility of
matter.

conservation
of
matter
indestructibility

And note again that Nature still dissolves
Each to its own component parts, nor e'er
Destroys entirely. For indeed if aught
Were mortal in its several parts, why then
Each thing at once would vanish from our eyes.
No force would be required to destroy
Its parts, and cut the bonds. But as it is
Since each is formed of seed imperishable,
Until force is applied to burst in twain,
Or penetrating inwardly dissolve,
In Nature no destruction can be seen.
Beside, whatever time removes by lapse
Of years, if it be utterly destroyed,
How is it Venus brings to the light of day
After their kind the various animals?
Or whence does Earth, the skilled artificer,
Increase and nourish them, and give them food?
How is it that the sea by natural springs
And rivers flowing far and wide is fed?
How does the sky the stars renew? Sure all

ON THE NATURE OF THINGS

i., 232-261.

That is of mortal body must have been
Consumed by passing years, and fleeting time.
But if in all that time, and long before
These things of which all nature is composed
Have still endured and lived, then certainly
They are with immortality endowed,
And nothing still to nothing can return.
Lastly all things would be alike destroyed
By the same force and cause, if they were not
Themselves endowed with immortality,
More or less closely each with each combined.
Else would a single touch be cause of death,
Since any force suffices to dissolve,
What is not dowered with immortality.
But since the primal elements are bound
By various ties together, in themselves
Immortal, they can stand the shocks of time,
Until there comes a force that can undo.
So naught returns to naught, but when dissolved
All things return to matter once again.
Take a last instance: rain you think is gone
When father Ether now has dashed it down
Upon our mother Earth. Yes, it is gone:
But brilliant cornfields follow, branches grow,
With leaves upon the trees, the trees themselves
With fruit are laden, so the race of man
And beasts are fed: and cities, you may see
How they resound with children's songs around:
The leafy woods are full of singing birds,
The wearied herds in the rejoicing fields
Lie down to rest, while from full udders flows
The milky stream, and the young ones at play
With tottering footsteps gambol on the grass,
With the pure milk their little hearts bestirred.

T. LUCRETIUS CARUS

i., 262-281.

So naught we see does altogether die:
Nature renews them one by one, each death
Is but the portal of another life.

But you
say you
cannot
see these
processes
of Nature.
But there
are many
ways in
which she
works
invisibly.

And now since I have taught that nothing
comes

From nothing, and once born can ne'er return
To naught again, yet lest you should begin
To doubt my words, because you nothing see
Of these first elements, know there are things,
Which must exist, and yet are never seen.

First then the tempest's force beats on the
shores

And wrecks the mighty ships, and drives the clouds,
While passing o'er the plains with hurried force
It strews its course with mighty trees, and strikes
The topmost mountains blows that shake the
woods,

So fiercely roars, with threatening voice, the
storm.

There are then, it would seem, these viewless
winds,*

Endowed with bodies which you cannot see,
Which sweep along the earth, the sea, the sky,
And vex with sudden whirlwinds, nor do they
Stream on and scatter havoc otherwise
Than as the gentle force of water,† when

* Cf. Shakespeare, *Measure for Measure*, i. 1:

'To be imprisoned in the viewless winds.'

† Imitated from Homer's *Iliad*, v. 87:

'Like to a wintry stream, that brimming o'er
Breaks down its barriers in its rapid course:
Nor well-built bridge can stem the flood, nor fence
That guards the fertile fields, as down it pours
Its sudden torrent swol'n with rain from Heaven,
And many a goodly work of man destroys.'

LORD DERBY.

ON THE NATURE OF THINGS

i., 282-309.

With sudden stream, augmented from the hills
By heavy rains, it rushes from above
Hurling the forest's wrack and mighty trees:
Nor can the strong-built bridges ev'n endure
Its sudden onset, driven by the floods
The river rushes on the piles with all
Its strength, spreads ruin with a roar,
Displaces mighty stones, and sweeps away
Whatever may impede its onward rush.
Just so then must the blasts of wind advance,
And when like some strong stream they have been
borne

In one direction, they sweep all away
And ruin all around with frequent storms,
Or sometimes catch things up with eddying whirls
And bear them off with swirling hurricanes.
Wherefore once more there are, be sure, these
winds

Whose forms you cannot see, which emulate
In deeds and ways the mighty river's force,
All visible enough. There are again
The scents of various objects, whose approach
Your sight cannot detect; nor do we see
The heat of summer, nor the winter's cold:
Nor voices which we hear can we descry:
And yet these things must have a body, since
They all affect our senses, and unless
They had such body they could not be touched
Or touch us in return. Another case,
Clothes hung upon the wave-beat shore grow damp
And in the sun they dry, and yet the while
You cannot see the dampness soaking in,
Nor how it flies before the heat again.
The dampness then in little particles

T. LUCRETII CARUS

i., 310-335.

Must be contained, which you can never see.
Again when passing years have come and gone,
The ring upon your finger grows quite thin
By constant use, and dropping wears the stone,
The crookèd share of iron smaller grows
Although you see it not, within the fields;
The flints upon the streets worn by the tread
Of multitudes decay, and by the gates
The brazen statues show their hands grown thin*
By touch of men, when passing to and fro.
Thus all these things grow less when rubbed
away:

But when the various particles depart,
This jealous Nature will not let us see.
Lastly, whatever time and Nature adds
To things, compelling gradual increase,
No sharpness of the eye can e'er detect:
Nor yet whate'er grows thin, and old, and
worn:

Nor in the rocks, which hang above the sea
All eaten by the hungry spray can you
Detect the parts they lose from time to time.
So Nature works by means you cannot see.

There is,
too, a Void
in Nature.

Nor yet are all things kept quite tightly pressed,
Their bodies in a mass together held:
There is in things a Void: which useful 'tis
For you to know, nor always be in doubt,
And questing of the universe of things,
Distrusting me. If there were not a Void

* Cicero, *Verres*, ii. 4, 43, mentions the case of a statue of Hercules, at Agrigentum, 'whose lips and chin are a little worn, because in their prayers and thanksgivings men are wont not only to worship but to kiss it.' The toe of the famous statue of St. Peter, at Rome, said to have been cast from one of Jupiter Capitolinus, is another case in point.

*Atoms - Void
comprise the Universe*

ON THE NATURE OF THINGS

i., 336-365.

Nothing could move, for as a body has
For function still to hinder and obstruct,
It would do so in every case, and then
No progress could be made, since nothing would
Be first to make a way. But now on sea,
On land, and in the heaven's heights above
Our eyes behold things move in many ways
Which were there not a void, would not so much
Lack stir and motion, as that they would ne'er
Have been at all, but closely pressed together
Would have remained at rest the ages through.
Besides, although things solid seem to us,
You yet may see they are of body fine.
In rocks and caves the moisture oozes through,
And all is dripping wet: food makes its way
Throughout our bodies: trees can make their
growth,
And in due time bear fruit, because their food
Is still from deepest roots to branch and stem
Dispersed right through: then noises creep through
walls,
And through closed doors are heard: the frosty
cold
Can reach our bones: were there no void at all,
However could they pass? Why, never then
Could they exist at all. And why, I ask,
Is this of greater weight than that, although
In size no larger? if there be as much
Of body in a ball of wool, as in
A lump of lead, why they should weigh the same:
A body presses all things close together,
A void is without weight, and therefore if
A thing as large is lighter, 'tis a proof
That it contains more void: if heavier,

T. LUCRETIUS CARUS

i., 366-397.

There is more body, less of void within.

Therefore, as we by reasoning seek to know,

There is what we term void contained in things.

And, here lest what some idly dream should lead

You far astray from truth, I am compelled

To anticipate the argument they use.

They say that water to the scaly host

Yields as they pass, and opens liquid paths,

Because the fishes leave a space behind

To which the waves can flow: so other things

Can move and change position, though they are

Of solids formed. The reasoning is false.

For how unless the waters made a way

Could fishes onward swim? How could the waves

Give place, or whither go, if they shall not

Be able to go forward? So either then

Some bodies are of motion still deprived

Or else there is a void, where each thing takes

The first idea of movement. So again

If when they meet, two bodies quickly part,

Surely it must be air, that occupies

The void that comes between: and yet though
quick

Its currents flow to occupy the space,

It cannot all at once be filled: it fills

Each part in turn, until the whole be full.

But if one thinks, when bodies separate

'Tis that the air condenses, he is wrong:

For then there is a void which was not there

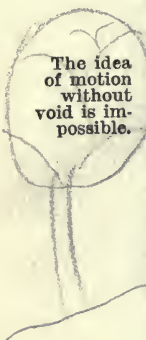
Before, while that which was, is filled again.

Nor can the air condense in such a way,

Nor if indeed it could, without a void

Could it, methinks, contract itself and draw

Its parts together into one again.



The idea
of motion
without
void is im-
possible.

ON THE NATURE OF THINGS

i., 398-427.

The length
and com-
plexity
of the
subject.

Wherefore, however much you may delay,
Alleging various reasons, in the end
You must admit there is a void. And I
Could still say many things to prove my words.
But for a sapient mind, these footprints which
I indicate are in themselves enough
To show the rest. For as the hounds full oft
By scent find out the leafy lair of some
Wild mountain-roaming beast, when once they've
hit

Sure traces of his path, so you yourself
One thing upon another now can see
In themes like these, and make your way alone
Through all the hidden coverts that there are,
And draw the Truth from thence. And if you tire
Or slacken somewhat in the chase, yet still
This, Memmius, can I promise you off-hand,
That such large bounteous draughts from mighty
springs

My tongue will pour from my own heart so full,
That much I fear old age will on us creep,
And loose the strings of life, before your ears
Have heard ev'n on one subject all my song.

Now to resume the thread of my design.

All nature, as it is, is formed and framed
Of these two things, of bodies and a void,
In which they dwell, and move them to and fro.
For that there is a body feeling proves,
Feeling that all possess: unless in this
Your faith is fixed and sure, there will be naught
To which we can refer in hidden things
To prove our points by reasoning of the mind.
And next unless there be both room and space
Which we term void, nowhere could bodies be,

All things
then con-
sist of body
and void.

T. LUCRETIUS CARUS

i., 428-456.

Or move at all, as I have tried to prove.
And furthermore 'tis sure there nothing is
Of which you can affirm 'tis not a void
Nor yet a solid body, which might form
As 'twere a separate element, a third.
Whatever is, must still be something sure:
If it admit of touch, however small,
And be increased in large or small degree,
So long as it is there, it must enlarge
The body's size, and so increase the whole.
But if you cannot touch it, and it can't
Prevent things passing through it in their course,
Then here you have what we call void. Besides,
Whatever is has something fixed to do,
Or suffers from what others do to it,
Or is the medium in which they live:
But naught that has no body e'er can act,
Nor yet be acted on, nor can there be
For action room, unless there is a void.
Therefore be sure, that no third element
Exists in nature, but these two alone,
A body and a void, none that our sense
Can seize at any time, or we can grasp
In any way by reasoning of our mind.

✕
All other
things are
properties
or acci-
dents of
these two—
body and
void.

Thus all things whatsoever can be named
You'll find are properties of these two things,
Close linked to them, or else their accidents.
A property of anything is that —————
Which cannot be disjoined or sundered from it
Without some loss, as from a stone its weight,
From fire its heat, from water moisture, touch
From all, from void intangibility.
But slavery, or property, or wealth,
Or liberty, or war, or days of peace,

ON THE NATURE OF THINGS

i., 457-482.

And other things that come and go, while still
Nature remains unchanged, these fittingly
We say are accidents. Thus time itself /
Has no existence of its own, but we
By sense discern what has been done of yore,
What passes now, and what will come to pass.
You cannot handle it, you only know
That it is there by motion of events
Or by their absence. So when men discourse
Of Tyndarus's daughter and her fate,
Or how the Trojan nation was o'ercome,
We must take care, lest we are led to think
These actual facts, since now the race of men
Of whom they were the accidents is gone,
Gone in the days long past beyond recall.
These great events are but the accidents
That happened in the earth,* or at the place.
If there had been no matter in the world,
No room and space for such events to grow,
Ne'er had the lovely form of Tyndaris
Kindled the flame which sank so deep within
The breast of Alexander, Phrygia's lord,
And lighted up the fires of savage war :
Nor would the wooden horse, all secretly
Without the knowledge of the Trojan chiefs
Have set famed Troy on flames, when from its womb
By night in silence issued forth the Greeks.
So that you see that actions, such as these,
Do not exist, as bodies do, themselves,
Nor are they as a void, but rather spring,
As accidents of body and of space
In which they one and all are carried on.

* Read *terris*: not *Teucris*, as Monro. Cf. *Classical Quarterly*, July, 1917.

T. LUCRETIUS CARUS

i., 483-514.

Bodies are
formed of
atoms—
solid, inde-
structible,
indivisible.

Bodies again are partly primal seeds,
Or formed by union of such. These seeds
No force affects, for their solidity
Will still prevail. And yet 'tis hard to think
That solid bodies ever can be found.
The thunderbolt that wings its way below,
Passes through solid walls as easily
As sounds and voices: iron grows red-hot
When in the fire, and rocks are burst asunder
Subjected to fierce heat, which too can melt
The hardest gold, and ice of brass dissolve;
And warmth and cold we feel alike can come
Through solid silver, as we often learn
When holding cups with water poured therein.
'Twould seem that nothing solid can be found
In Nature's realms: yet wait and we will show
As reason and the course of things compels,
Quite briefly, that there are such bodies still,
Solid and everlasting, these the seeds
From which according to our teaching comes
The total sum of all created things.

The rela-
tions of
body and
void.

First then since we have found that there
exists
A twofold nature from which all things come,
And in which all things constantly go on,
Body and Space, it follows these must be
Quite independent still, and self-contained.
Where body is, space is not: and where space
There body cannot be. And so we find
These primal bodies solid without void.
Again since there is void in things begotten,
There must be solid matter all around,
And nothing can in reason e'er contain
And have within itself a void, unless

ON THE NATURE OF THINGS

i., 515-516.

You hold it ascertained that there exists
Some solid body, which can keep it in.
And that 'tis plain must be some union
Of matter, which, though all things are dissolved,
May be immortal. If there were no void,
All would be solid: if again there were
No bodies which could fill their appointed space,
There would be naught but empty formless void.
And so 'tis plain that turn and turn about
Body and void exist, since that the world
Is neither altogether full, nor void.
There are then bodies which can thus mark out
The space that's empty, from the space that's
full.

These cannot be dispersed by blows without,
Nor yet undone by forces from within,
Nor fail from any cause: as I have proved.
For without void 'tis plain naught can be crushed,
Or broken, or by cutting torn in two,
Or suffer loss by damp, or gnawing cold,
Or penetrating heat, which all destroy.
The more of void that anything contains,
The easier when assailed, it falls away.
And so if these first bodies, as I've shown,
Are solid, free from void, they are eternal.
If matter had not been so, long ago
All things had disappeared, and what we see
Had been made new from naught. But since I've
proved
Naught can be made from naught, and what's
once been
Can never be destroyed, there sure must be
Original elements which live for aye,
And into which all things can be resolved,

T. LUCRETIUS CARUS

i., 547-576.

At their last hour, that there may still remain
Matter from which the world may be renewed.
These primal elements must still remain
Solid and simple, in no other way
Can they have been reserved through endless time
Adown the ages to renew the world.

There is a
limit to the
divisibility
of seeds or
atoms.

Again, if Nature had no limit placed
To its destructive powers, matter itself
Had been so much reduced by age's wear
That future growth had been impossible
Within a given time: for everything
We see is far more easily destroyed
Than made afresh: and so whate'er
The long and limitless expanse of years
With its disturbing and dissolving power
Has broken up, could never be restored
In time that yet remains. But as it is
There is a limit to destructive force,
Since everything we see again restored,
And stated times are fixed for each in turn
To reach the flower and blossom of their life.
And add to this, though matter is itself
Most solid, yet we still can give account
Of softer things, earth, air, and fire and water,
How they are brought about, and by what force
They are created, if you once admit
That there is void in things. But lacking that,
If the first elements themselves were soft,
How could you e'er explain the solid flint,
The unyielding iron: for surely they would find
No base at all on which to found themselves.
There are then elements of solid strength,
Of which combined all things are closely knit
Together, and put forth their utmost strength.

ON THE NATURE OF THINGS

i., 577-609.

The persistence of forms too proves that there are original eternal atoms.

Further, e'en if no limit was assigned
For the dispersion of the things we see,
Still from illimitable time 'tis clear
The several bodies must have still endured
Existing without any fear of change.
But since though breakable they thus remain,
'Tis not in reason that they could endure
Throughout eternity the object still
Of blows unnumbered. And yet once again
Since there has been assigned a time to grow,
A time in which to live, what they can do
By Nature's laws, what not, since all's arranged,
Nor suffers any change, not ev'n the birds
Can change the marks which show their various
kinds,

It follows there must be to each and all
A body that can show no trace of change.
For if the elements of things could alter
And be in turn o'ercome, 'twould be in doubt
What might or might not be the issue still,
What is the power assigned to each, and what
The deep-set boundary none can pass, nor could
The tribes each in their order show their kind,
The habits, motions, fashions of their sires.

The solidity of the seeds.

Then too since in that body which our sense
Already can't detect, there is beyond
An extreme point, that furthest point itself
Is without parts, is of the smallest size,
Does not exist alone, nor ever has,
Nor ever will, but still combined together
One after other in a serried mass,
They go to form the primal body; there
They cling together, and cannot be torn
Asunder. Thus these first beginnings are

T. LUCRETII CARUS

., 610-638.

Of solid singleness, which massed together
Closely cohere by means of their least parts,
Not joined together by an union of them,
But strong in everlasting singleness.
Nature allows naught to be torn away,
And naught diminished, they are kept as seeds,
For future things, repairing those that die.
Besides, unless there be in each a least,
The smallest bodies ever will consist
Of parts innumerable, inasmuch as half
Will still divide in half again, and so
No limit will be reached. What difference then
We ask is there between the whole and part?
There will be none at all. However much
The whole is infinite, its smallest parts
Will still be infinite, each one of them.
On this since reason enters a protest
And says it is impossible, yet you
Must grant that it is wrong, and so admit
That there are things which without parts exist
And are quite small: 'tis clear that they are there,
And must be granted solid, everlasting.
And furthermore if it had been agreed
By Nature, great creatress of the world,
That all things into little parts should be
Resolved, then out of them she would not have
The means of reparation, since those parts
Would have no generating power, such as
Meetings together, weights, blows, motions too
By means of which things ever are being born.
And, so it is, that they who've held that fire
Of things is still the substance, and of it
The whole consists, seem to have travelled far
From true philosophy. At head of whom

False
theory of
Heracitus
that fire is
the primal
substance.

ON THE NATURE OF THINGS

.. 639-648.

Comes Heraclitus* to the fight, who's famed
For want of clearness more 'mong foolish Greeks
Than those more earnest ones who seek the truth.
For stupid people still admire and love
Things which they see concealed in obscure words,
And think that all is true that tickles well
The ears, and is adorned with pretty phrase.

Objections
to his
theory.

I ask how things can e'er so varied be
If formed of fire alone? 'Twould nothing help
If fire could be condensed or rarified,
If it were in its parts still like the whole.
The heat would be the greater, if compressed,
Less with its parts dispersed, and scattered wide.
More you could not expect, nor could such wide
Variety of things arise from fire,
Denser or rarer as the case might be.
If, too, they once admit there is a void,
Fire then might be condensed and still left rare;
But yet because they see there's much against,
And shrink from admitting unmixed void in things,
Fearing the steeper road, they miss the truth,
Perceiving not, if you remove the void,
All things are denser made, and of them all
One body is, which has no power to send
Aught from it, as heat-giving flame can throw
Both light and warmth, and thus does let you know
That 'tis not formed of closely compressed parts.
But if they think in any other way
Fires may be quenched by union, and change
Their body, if they this believe can be
At any point, be sure all heat itself

* Heraclitus, a Greek philosopher of Ephesus, 540-475 B.C. He held that the primary substance of which the world was formed was fire. Cicero calls him the 'obscure' philosopher.—*De Fin.* ii. 5. 15.

T. LUCRETII CARUS

i., 669-698.

Will be extinguished, and all things that are
From nothing will be made. When anything
Changes its proper limits, that which was
Before, is dead. It follows something then
Must still be left these fires of theirs, or else
All things return to nothing, and reborn
From nothing grows again the store of things.
Since then there are some bodies fixed and sure,
Preserving still the character they had,
Whose going and whose coming and whose change
Enables things to change and be transformed,
Know well it is not fire of which they're made.
'Twould matter not that some withdraw and go
Away, and some be added and some change,
If still they all retained their heat, for all
That was produced by them would still be fire.
But as I think the truth is this: there are
Some bodies whose chance meetings, motions,
 shapes,
Positions, order, fire produce, and if
Their order's changed, their nature's changed and
 they
Are fire no more, nor yet are like aught else,
Which can affect our senses by the touch.

Our senses
tell us it is
not so.

Again, to say that all things are but fire,
That naught but fire does exist in things,
As this man does, what is it but to be
A doting fool? Beginning with the senses
He fights against them, and denies their power,
On whom rests our belief, from whom indeed
This fire to himself is known: for he believes
He knows of it by sense, yet won't believe
The other things he knows by sense as well.
This seems to me an idle foolish thing.

ON THE NATURE OF THINGS

i., 699-719.

Let's think: what can there be more sure than
sense,

To recognise what's true and false? And why
Should any wish to take all things away
And leave us fire alone, more than deny
That fires exist, yet leave the rest alone?
Whiche'er you do seems to be madness still.

Other false
theories—
are of Em-
pedocles.

And therefore all who've held that fire alone
Is still of things the substance, that the whole
Is formed of fire, or yet again that air
Is the first cause, or that all things can come
From water, or from earth by constant change,
Seem very far to have left the truth behind.
And so do they who duplicate these things
Add air to fire, or earth to water, thus
From these four things believing all can come.*
Of whom Empedocles,† of Agrigentum town,
Is far the first, whom that three-cornered isle,
Round which the Ionian Sea with winding bays
Still flows and dashes its green surges, bore.
For here the narrow sound with racing tides ‡
Parts with its waves the shores of Italy

* Shakespeare, *Twelfth Night*, ii. 3, 10:

SIR TOBY. 'Does not our life consist of the four elements?'

SIR ANDREW. 'Faith, so they say: but I think rather it consists
of eating and drinking.'

† Empedocles, 490-430 B.C., born at Agrigentum, in Sicily. He
thought the earth was formed of four elements: earth, air, fire,
and water. He was honoured by the people of his native town as
statesman, prophet, physicist, physician, and reformer. Cf. M.
Arnold's *Empedocles on Etna*.

‡ Cf. M. Arnold's *Empedocles on Etna*:

'That sea far down
O'er whose lit floor a road of moonbeams leads
To Etna's Liparian sister fires,
And the long dusky line of Italy.'

T. LUCRETII CARUS

i., 720-751.

From the other coast: here is Charybdis vast,
While Etna rumbling threatens once again
To gather up the fury of its flames,
And belch forth from its throat its fires, and dash
Right up to heaven the flashing of its flame.
Now while this land is worthy to be seen,
And should be visited, so rich in wealth,
So strong in men to guard it, nothing seems
To be more famous, more to be revered,
More dear, more wondrous than this man himself.
The strains of his great genius cry aloud,
His great discoveries proclaim to all,
That ev'n he scarce appears of mortal birth.

Their
errors.

Yet even he and those whom we have named,
Inferior to him, and much lesser men,
Although they've given from their heart of hearts
Many divine discoveries, and much
That's truly great in a more serious way,
And based on far more true and certain grounds
Than Pythia, who speaks with laurel crowned
From Phoebus' temple, yet have shipwreck made
As to the way things first began: and though
So great themselves, great was the fall they made.
First 'tis because rejecting void in things
They yet assign them motions, and declare
Such things as air, fire, earth, and sun, and corn,
And living things to be of texture slight,
And yet without a void: and secondly
Because they put no limit to the way
In which you can divide them, and no stay
To breaking them, and think there is in things
No smallest part, although we see that that
Is still the bounding point, which to our sense
Appears the least: from this you can infer,

ON THE NATURE OF THINGS

i., 752-781.

Although you cannot see, there is a least
In everything. Moreover since they assign
Soft primal germs to many things we see,
Continually born, of mortal mould,
Since these they say are soft, it follows then,
The whole returns to nothing, and of naught
The store of things must be reborn and grow :
How far this is from truth you now can know.
These bodies too in many ways are foes
And poisonous to each other, so that if
They meet, they die, or fly as far apart,
As in a gathering storm we often see
The lightnings, winds and rains asunder fly.

Things
might just
as well be
their
elements.

Again, if all things are produced from four,
And into them again dissolve, how can it be
That they are called beginnings, any more
Than, if the process be reversed, the things
Themselves might so be called. For still in turn
They are begotten, and their colour change,
Aye, and their nature still unceasingly.
But if you hold the mass of fire and earth
And air and moisture meet in such a way
That by the union nothing changes, then
Nothing from them will ever be produced,
No living thing, no body, like a tree,
Inanimate: but each amid the mass
Of varying matter, will remain itself
With its own character, and air be seen
Mixed up with Earth, and water joined with heat
But first beginnings in begetting things
Should keep a nature latent and unseen
That naught may come to light that will obstruct
And so prevent each thing that is create
From having its own proper character.

T. LUCRETII CARUS

i., 782-807.

They suppose an endless change, but first elements must have permanence.

So back they fly to heaven and its fires,
And first allege that fire can change to air,
From air comes water, and from water earth;
Then all from earth in turn are reproduced,
Moisture, and air, and heat, that these again
Are ever changing, pass from heaven to earth,
And from the earth to the bright stars above.
But this the primal germs should never do:
Something unchanging sure must still be left,
Lest all to nothing should be quite reduced.
For when things change and quit their proper
state,
Then that which was, dies down and disappears;
So since these things which we have named just
now
Still change, 'tis clear that they must take their
form
From that which cannot change, or else you have
All things return to nothing once again.
So why not rather hold that certain things
Are so endowed by nature, that if they
Have fire produced, then if a few you add,
And some remove, and change the order of
Their coming and their motion, you will find
Air is produced: and so with other things
They all may interchange with one another.
'But then,' you say, 'facts manifestly prove
That all things upward grow into the air,
And from the earth are fed: and that unless
At the fit time the season favours them
With showers and storms that make the trees to
rock,
Beneath the soaking rain that is outpoured;
Unless the sun can do its part, give heat

Objection that all these things are required in growth: its explanation.

ON THE NATURE OF THINGS

i., 808-832.

And make them grow, fruits, trees, and living things

Can ne'er increase.' Quite true and so with us,

If food and moisture fine lend not its aid,

The body sure would perish, and all life

Out of the bones and sinews pass away:

For we beyond a doubt are nourished

And fed by certain things: others again

By others in their turn. In truth it is

Because so many primal germs are mixed

In many ways with various other things

That different things in various ways are fed.

And often 'tis important to observe

And note these primal germs, how they are mixed,

And how they're placed, how they move to and fro;

What motions they impart to each in turn,

For from the same heaven, sea, lands, rivers, sun,

Are formed, as well as corn, trees, living things:

But they are variously mixed in various ways.

Why everywhere, even in this verse of ours,

The letters oft are shared by many words

In common, though you must admit the lines

And words still differ both in sense and sound,

So much can be affected by a change

Of place: but those which are the primal germs

More things by combination can produce.

There's Anaxagoras* who spoke in Greek

Of what he termed 'homœomeria'—

Our native speech's poverty of words

* Anaxagoras, of Clazomenæ in Ionia, born 500 B.C., who taught that the 'homœomeria' were the seeds of which the world was made—at first huddled together in chaos, but later arranged in order by an almighty, all-wise mind, each similar to the things formed of them.

T. LUCRETII CARUS

i., 833-863.

Will not permit our naming it, although
Its meaning can be easily explained.
For first he thinks, for instance, bones are formed
Of very small and minute bones, so flesh
Of very small and minute bits, and blood
By the union of many drops of it:
And so he thinks that gold of golden grains
Is framed, and earth of little bits of earth
Can grow, moisture from moisture, fire from fire,
And so in the same way of all things else:
And yet he allows no void, no bounds are set
To things dividing. Thus he seems to me
To err as much as those I named before.
Besides, too frail his primal germs must be
If they be only such as are possessed
Of a nature like the things themselves, and have
No more immunity from toil and death,
Nothing to stay destruction. Which of them
Will stand against strong force, and death escape
When in the very jaws of fate? Will fire,
Or air, or water, aye or blood, or bones?
Not one, methinks, since each and all will be
As mortal utterly as those we see
Perish before our eyes o'ercome by force.
I call to witness, what I've shown before,
Things cannot shrink to naught, or from it grow.
Besides, since food maintains and nourishes
Our frame, you know our veins, and blood, and
bones,
And nerves, are formed of things unlike them-
selves:
Or if they say all foods are mixed in kind,
And have within them particles of sinews,
And bones, and veins, and drops of blood as well,

ON THE NATURE OF THINGS

l., 864-896.

Then it will follow that our food itself,
Solid as well as liquid, is composed
Of something foreign to it, that is, bones,
Sinews, and veins and blood all mixed together.
Again, if all that grows out of the earth
Is in the earth, the earth must be composed
Of foreign elements, which spring from it.
Take something else and you may say the same;
If flame and smoke and ash lie hid in wood
Then wood consists of alien elements.

Anaxagoras
evades this
by saying
all things
are in all
things:
which is
not true.

And here is some slight opening for evasion,
Which Anaxagoras takes, and thinks all things
Mixed up in things lie unobserved, and one
Alone is visible, of which there is
The most, the most in view, most prominent.
But this is far from what true reason says.
If it were so then corn when crushed by force
Of threatening stone would show some mark of
blood,
Or something else our bodies may contain:
Or stone being rubbed by stone, the blood would
flow.

Likewise the grasses too should yield sweet drops
Like to the milk in udder of the sheep:
When earth is broken up there would be seen
Grasses and corn and leaves distributed,
And lurking quite minute within the soil:
And last of all that ashes, smoke, and fire
You'd find in logs when they were snapped in
two.

And since plain fact declares it is not so,
You recognise things are not mingled thus,
But that the germs common to many things
In many ways are mixed up, and lie hid.

T. LUCRETIVS CARVS

The argument from forest conflagrations.

XI., 897-923.

‘But still,’ you say, ‘upon the mountain tops
The towering trees are often rubbed together
When strong south winds do blow, until a flame
Straight breaking out, they burst into a blaze.’
Quite true : yet fire is not innate in wood ;
But there are seeds of heat, which rubbed together
Thus make the forest blaze. But if so great
A flame were hidden in woods, it could not be
For long concealed, ’twould make an end of woods,
Burn up the trees. Now don’t you recognise
That as we said before it matters much
With what things and how placed these primal
germs
Are held in union, and what motion give,
And in their return receive. The same thing may
When changed a little bring forth fires and firs ?
Just as we see the words themselves are formed
Of letters slightly changed when we denote
These firs and fires each by a different name.
And once again, whatever you may see
As patent facts, if you believe that they
Can only be produced, if you assume
They are evolved from bodies like themselves,
On these terms surely primal germs will cease
To exist at all, and it will come to this,
They’ll shake themselves with laughter evermore,
And down their cheeks and face salt tears will
flow.

The aim of
Lucretius.

And now consider what remains, and learn
It still more clearly : nor do I at all
Still fail to see how dark these questions are.
But hope of fame* has struck my inmost heart

* Cf. Milton, *Lycidas*, 70 :

‘Fame is the spur, that the clear spirit doth raise.’

ON THE NATURE OF THINGS

i., 924-948.

With its keen spur, and thrilled my breast within
With the sweet Muse's love: with this inspired
With dauntless heart I tread the pathless ways
Of the Pierides, untrodden yet
By any foot of man. 'Tis sweet to approach
The untasted springs and drink, to cull fresh
flowers,

And gather for my brows a glorious crown
With which the Muses in the days gone by
Have never decked the brows of any man.
This first because my theme is great, and I
For object have to free men's minds from fear
Of the bonds religious scruples have imposed.
And next because I pen such lucid lines
On matters hard, and serious, and attempt
To deck my poems with the Muse's charm.
That too would seem to me a useful task.
For as physicians when they have to give
Some nauseous draught to children, smear the edge
Around the cup with the sweet yellow juice
Of honey, that their unsuspecting years
May thus be duped, as far as lips can be,
And so may swallow down the bitter draught
And though deceived,* yet be not quite betrayed,
But by such means recruited strength regain.
So I now since this teaching seems to be
Bitter to those who have not handled it,
And the common herd start back on seeing it,
I have resolved to explain our plan to you
In sweet Pierian verse, and smear it o'er
With the sweet honey of the Muses' song,
If so by these means I might fix your mind

* Munro quotes Fairfax's translation of *Tasso*:

'They drink deceived, and so deceived they live.'

T. LUCRETIUS CARUS

i., 949-979.

Upon my verse till you perceive the whole
Of Nature's plan, and how it has been framed.

Space is
infinite.

But since I've taught that solid bodies fly
For ever still unconquered through the years,
Come now let us unfold, if that there be
A limit to their sum or not: and then
Let's see if void and room and space, in which
All things go on is strictly limited,
Or stretches still immeasurably deep.

The
universe is
infinite.

Well then, the universe we see is not
Bounded in its dimensions: were it so
There must have been an outside boundary.
There can be no such limit here, unless
Something there be beyond to bound it, which
Lies far away beyond our senses' scan.
Now since we must admit that there is naught
Beyond, there is no limit and no end.
Nor does it matter, where you take your stand,
Whatever post one holds towards all its parts
One finds it infinite. And even if
We hold all space is bounded, if one runs
Far as one can, to its extremest verge,
And throws a wingèd dart, do you suppose
That hurled with vigour it achieves its aim
And flies afar, or do you think its way
Is barred by something that obstructs its course?
One view or other you must sure adopt.
But either shuts you out from all escape,
And forces you to admit no limit is
To this our universe. For if there be
Something to hinder it to reach its goal,
The point he aimed at, or if it is borne
Right far away, in either case 'tis clear
It has not reached the full extremity.

ON THE NATURE OF THINGS

i., 980-1009.

And so I will go on, and when you've reached
The furthest point, wherever it may be,
Will ask what of the weapon that you flung?
And 'twill turn out that there will be no end:
The room for flight will still the flight prolong.
And lastly, to the eye one thing is seen
To end another: air still bounds the hills,
The mountains bound the air, the earth the sea,
The sea's the limit of the land, but there
Is naught beyond to bound the universe.

So space
is infinite.

Beside, if all the universe were shut
Within fixed limits, and were bounded in,
The mass of matter by its solid weight
Would still tend to the bottom, nor could aught
Have gone on 'neath the covering of the sky,
Nor would there be a heaven or a sun
Since matters, settling from eternity,
Would all be heaped together, sinking still.
But as it is, no rest at all is given
To the primal germs, because there is for them
No lowest point, where they might gather up
And take their posts. Thus all things ever go
In ceaseless motion still from every side,
And parts of matter into action stirred
Are still from space eternally supplied.
And so the room they have, the space profound
Is such as not the thunderbolts, which glide
Through endless tracts of time, can ever pass,
Nor can effect with all their hasting on
That they less distance have to go. So large
The space spread out on every side for them,
Without a boundary fixed in any part.

Nature too
is infinite.

Nature itself prevents the sum of things
From putting any limit to itself,

T. LUCRETIUS CARUS

i., 1010-1035.

By still compelling Void to bound a body,
And body Void, so that she renders each
In turn still infinite: or else the one,
Unless the other bounds it, stretches out
Alone, just as it is, immeasurably.
But space I've shown without a limit spreads.
If then the sum of matter bounded were,
Nor sea, nor earth, nor heaven's quarters bright,
Nor mortal man, nor sacred Deities
Could hold their ground ev'n for a passing hour
Since forced asunder matter's mighty mass
Would be dissolved and borne away through void,
Or rather never would have been combined,
Or aught created, scattered as it was.
For sure it was not by a set design
These primal germs then took their proper place,
Of their own knowledge, nor did they arrange
Their future motions, but because they were
In number many, changed in many ways,
Shifted about by blows through endless time,
Trying all motions and all unions too,
They reached at last to dispositions such
As now has formed this universe of ours,
By which it is preserved through the great years*
Whence, once its motions have been all arranged,
It makes the rivers feed the greedy sea
With the rich waters of their rolling streams
And earth fed with the sun's heat still renews
Its produce, and the race of living things
To flourish, and heaven's gliding fires to roll:
Which could not be, had there not been a store

* The 'great years' are the *anni magni* or *Platonici*, reckoned up to 18,000 years, to be completed whenever all the heavenly bodies occupied the same places as they did when the world was made.
Cf. Virgil, *Ecl.* iv. 5.

ON THE NATURE OF THINGS

i., 1036-1062.

Of matter laid up in infinite space,
From which they might renew what has been lost.
For as, deprived of food, the race of things
Wastes, and the body pines, so all things else
Must be dissolved, as soon as matter fails,
And is diverted from its proper course.
Nor can mere blows without together hold
The universe thus formed: they can indeed
By blows arrest disunion in some part,
Till others come who can make good the whole.
Sometimes they are compelled to backward spring,
And so to give the primal germs a space
And time in which to fly, get clear away
From the mass in union. Wherefore again
And yet again I say there must arise
Full many bodies to supply their place,
And if these blows are not themselves to fail
There needs infinite matter everywhere.

It is not the
case that the
universe
is held
together by
centripetal
force.

And, Memmius, this at least refuse to think,
That, as some say, all things are pressing still
To the centre of the universe and so
The nature of the world stands firm, without
External pressure, nor can its various parts
Above or yet below be driven apart,
Because they all are ever pressing on
Toward the centre (if you can believe
That any thing can rest upon itself),
Or that the heavy parts which lie beneath
The earth are pressing upward still, and rest
Upon the earth turned upside down, just as
We see the images of things reflected
Upon the water. In the same way too
They assert that living things can walk about
Head downwards, and yet cannot fall from earth,

T. LUCRETII CARUS

l., 1063-1093.

Into the parts of heaven below, no more than we
Of our own will can fly to heaven above :
When they behold the sun, we see the stars,
They share with us the seasons as they pass,
And have their nights as long as are our days.
But sure 'tis idle error has devised
Such dreams for fools, because they have embraced
False principles. There can no centre be
Where void and space is infinite: nor if
There were a centre, could they rest them there,
More than they could in any other place.
For room and space, which we call void, must still,
Centre or no, give place to ponderous weights,
Wherever, in whatever way they go:
Nor is there any spot at which arrived
Bodies can lose their force of gravity
And rest on void: nor should the void in turn
Support aught, since by nature it gives way
Continually. Things therefore cannot be
Together held by drawing to the centre.

Things do
not all seek
the centre.

Besides, it is not everything they think
That presses to the centre, only those
Of earth and water, or such as are held
Together by an earthly body, as
The sea, the mighty mountain streams:
While on the other hand they teach thin air
And fires with all their heat are borne away
And leave the centre, and that so it is
That ether bickers with the stars above,
That the sun's flame is fed amidst the blue
Expanse of heaven, because the heat collects
In flying from the centre, nor could trees
Put forth their leaves upon the topmost boughs
If nature did not give them nourishment,

ON THE NATURE OF THINGS

i., 1094-1117.

Their reasoning's wrong and contradicts itself : *
 Space I have shown is infinite, and so
 Matter itself is infinite as well,
 Lest like the volant flames the world's works
 Should fly asunder through the mighty void,
 And all things else should follow in their course,
 The fabric of the heaven tumble down,
 And faithless earth forsake our trembling feet,
 And all things in the crashing far and wide
 Of earth and heaven should unloose their forms
 And ruin through the illimitable void : †
 And in one moment not a wrack remain,
 Save empty space and atoms blind and dead.
 For wheresoe'er these atoms first begin
 To fail, be sure that there's the gate of death,
 And through this matter straight will rush to ruin.

Memmius
 will learn
 by steps.

If this you learn (a little trouble helps),
 One thing upon another will grow clear,
 Dark night will never rob you of the road,
 Until you see the end of Nature's laws,
 And one thing known will light the way to all.

(* Three lines are supplied here by Munro.

† Cf. Tennyson, *Lucretius* :

'It seem'd

A void was made in Nature : all her bonds
 Crack'd : and I saw the flaring atom storms
 And torrents of her myriad universe
 Ruining along the illimitable inane.'

Milton, *Paradise Lost*, v. 867, has :

'Hell saw

Heaven ruining from Heaven.'

Shakespeare—*Tempest*, iv. i. :

'The great globe itself,

Yea, all which it inherit shall dissolve
 And, like this insubstantial pageant faded
 Leave not a wrack behind.

T. LUCRETII CARUS

BOOK II.

ii., 1-19.

The sweet-
ness of
knowledge
and its great
rewards.

SWEET* when the sea swells high with surging
winds

To watch another's peril from the shore ;
Not as rejoicing o'er his troublous fate :
But sweet to gaze on woes ourselves escape :
Sweet too to watch the great contests of war
Arrayed along the plain, ourselves at ease,
But naught more pleasant than to hold the forts,
The forts serene of calm philosophy
Established by the learning of the wise,
To look down from their heights and others see
Still wandering all abroad, and straying far
To reach the path of life, to find them still
Fighting for learning's or for birth's rewards,
Their days and nights in endless labour spent,
To rise to power and be the world's lords.

Nature's
needs.

†O miserable minds! O blinded hearts!
In what dark paths, what dangers life is spent,
Whate'er it be! Is it not plain to see
That Nature craves for nothing for itself,
More than that we should have the body free
From pain, and in the mind enjoy sweet peace
From care and fear set free? And so we see

* Montaigne quotes a French rendering :

'Quand on est sur le port à l'abri de l'orage
On sent à voir l'horreur de plus triste naufrage
Je ne sais quoi de doux.'

† Cf. Tennyson, *Geraint and Enid*, line 1 :

'O purblind race of miserable men, . . .
Here through the feeble twilight of our world
Groping.'

ON THE NATURE OF THINGS

ii., 20-41.

The body's nature only needs the things
That take away our pain, although sometimes
Yet other pleasures may be given to enjoy:
No more than this she asks, what though there are
No gilded boys all ranged along the walls
And holding flaming lamps in their right hands,
To grace the feasts and revels of the night :
Although the house with silver does not shine
Nor yet is bright with gold, nor do the roofs
Panelled in gold re-echo to the harp :

* What time though these be wanting they can
spread

Themselves upon the grass supinely laid,
Beside the flowing stream, beneath the trees,
And pleasantly refresh their wearied frames
With simple fare, rejoicing all the while,
Most when the season smiles, and gentle spring
Has spread the mead with flowers : fierce fever's
heat

Does not depart more quickly from the frame
Tossing beneath its painted tapestry
And blushing purple coverlets, than if
You have to lie in rags that clothe the poor.
Since all the wealth of Ind affects not then
Our mortal frame, nor noble birth, nor ev'n
The glory of a crown, what then remains
But to confess they profit not the mind.
Unless perchance when you behold your troops
Rage o'er the plain† in mimicry of war,

* Cf. Tennyson, *Lucretius* :

'No larger feast than under plane or pine
With neighbours laid along the grass.'

† The plain is the Campius Martius outside the walls of Rome,
where military reviews were held.

T. LUCRETII CARUS

ii., 42-63.

Strengthened with strong reserves and heavy horse,
 See them full armed all eager for the fight,
 'Mid these things, if religious scruples fly
 In terror from your mind, and fears of death
 Then leave your breast at ease and free from cares
 When that your fleet commands the seas afar :
 Yet if we see that these things after all
 Are mockeries, and food for laughter still,
 And if the fears of men, their haunting cares,
 Fly not the sounds of war nor clash of arms,
 But boldly seize on kings and potentates,*
 Respect not flashing gold nor purple robes,
 In splendour bright, how can you ever doubt
 The power of mighty reason, all the more
 Since life is but a struggle in the dark ?
 †For just as children tremble in the night,
 And fear whatever comes, so we at times
 In daylight dread things no more to be feared
 Than those which fright the children, which they
 think

Are sure to come. This terror surely then,
 This darkness of the mind, 'tis not the sun's
 Bright rays, nor glittering shafts of light expel,
 But Nature's face and knowledge of her laws.

Motion of
 the atoms.

See now I will explain what motion 'tis
 By which the germs their different things beget
 And, when begotten, break them up again,

* For another view, cf. Marlowe, *Tamburlaine*, ii. 5.

'A god is not so glorious as a king :
 I think the pleasure they enjoy in heaven
 Cannot compare with kingly joys in earth :
 To wear a crown enchased in pearl and gold
 Whose virtues carry with it life and death :
 To ask and have, command and be obeyed.'

† These lines recur iii. 87, vi. 35.

ON THE NATURE OF THINGS

ii., 64-92.

What force compels them, what velocity
Is given to them to travel through the void.
Do you give heed to all the words I say,
For know that matter, ev'n though closely packed,
Does not cohere for ever, since we see
All things diminish, and by length of years
Ebb quite away, withdrawn from sight by age,
And yet the whole stands fast and unimpaired,
Because the bodies which depart from each,
While they diminish what they leave, increase
The size of those to which they come, compel
Those to wax old, these to renew their youth.
Nor do they stay there, thus the universe
Is still renewed, men live and die by turns.
Some nations wax and others wane, and soon
The races of mankind are changed, and each
In turn to other hands the torch of life,*
As runners do.

Causes of
their
motion.

But if you think the seeds
Can stop, and stopping, there beget anew
Fresh motions of their own, you've lost your way
And wander far from truth For since they take
Their way through void it must be by their weight
Or by a blow from outside: when they meet
And clash together often they rebound:
Nor is it strange so solid as they are,
With naught behind their motion to arrest.
That you may see more clearly how these germs
Of matter are for ever tossed about,
Remember in the universe there is,
No lowest point, and that there is no place
Where these first atoms can at rest remain,
Since endless space illimitably spreads

* Cf. Plato, *Rep. ad init.* of the torch race.

T. LUCRETIUS CARUS

ii., 93-127.

And lies immense on every side, as I
Have often shown, and reason too affirms.
Since this is true, no rest is ever found
For germs throughout the void, but driven on
In ceaseless varied motion some rebound,
Leaving large gaps, while some are knit together
With hardly any interspace at all:

And these move closely bound with little space
Locked close by their own intertangled forms,
These form the rocks, the unyielding iron mass,
And things like these: but those which spring
apart

Rebounding with great intervals between,
These give us the thin air, the splendid sun:
And many more there are which wander on,
Through the mighty void and find no resting-
place,

In union with the rest, nor can they move
In close communion with them: and of these
I note we have an image, an idea
Always before our eyes. Look where the sun
Through some dark corner pours his brightest
beams,

A thousand little bodies you will see,
Mix in the rays, and there for ever fight
Arrayed in mimic troops, no pause they give
But meet and part again, nor ever cease.
From this you may conjecture of the germs
What 'tis for ever in the mighty void
To be tossed up and down. In some degree
Such small events may illustrate great things,
And give a clue to knowledge. So 'tis well
That you should note these bodies how they rush
In the sun's rays, because such rushes show

ON THE NATURE OF THINGS

ii., 128-159.

What secret hidden forces lie below.

For you will see that things are often driven
By unseen blows to change their course, and then
Driven back return now here, now there, again
On every side. And mark this, motions are
Due always to the primal germs themselves.
The germs move of themselves: the lesser ones,
Nearest the force of those from which they spring
Are driven onward by their unseen blows
And stir up those that somewhat larger are.
Thus motion mounts up by degrees, and so
Reaches our senses, so that those same germs,
That in the sunlight we can see, are moved
As well, and yet we cannot see the blows
By which they are for ever tossed about.

Velocity of
atoms.

And what velocity is given to them,
Memmius, you easily can discern: for when
The morn first sprinkles earth with early light
And varied birds fly through the pathless woods
And pour their liquid flutings through the air,
How suddenly at such a time the sun
Is wont to clothe all nature with his beams,
This is quite clear and manifest to all.
The heat and light which thus the sun emits
Pass not through empty void: and so are forced
To go more slowly, cleaving waves of air:
Nor one by one do the particles of heat
Pass on, but intermixed, and closely twined,
So that they are impeded from within,
Not less than from without, and forced to go
More slowly on their way. The solid seeds,
Strong in themselves, when they pass through the
void,
And nothing hinders from without, and they

T. LUCRETII CARUS

ii., 160-188.

Are striving to a single spot, to which
Their every effort tends, must far excel
In quickness, be more swiftly carried on,
Than the sun's rays and cover wider space
In the same time, that his bright shafts can do
As in their course they wander round the sky.
But think not that the gods preside o'er all,
Or follow out each atom in its course
To see the plan on which each moves along.

False view
that the
world was
made by
the Gods.

But some dull souls assert against this view,
That lacking the assistance of the Gods
Nature is powerless so to fit herself
To human plans, as in due course to change
The seasons of the year, and bring the crops :
And all the other things men seek to have,
To which the goddess pleasure, still our guide,
Prompts and invites, and with her fondling ways
Bids them by Venus' arts renew their race,
Lest men should cease. Ah, when they think the
gods

Made all these things for man, they seem to me
To have wandered very far from reason's truth.
Ev'n were I ignorant what these atoms are,
Yet this from what I know of Heaven's plans,
And other things agree, I would affirm
The world was never made for us by Gods :
So great are its defects. This, Memmius,
I will make clear hereafter, now let us
Proceed to finish what we have begun.

Cause of
motion of
the atoms.

Here is the place I think to prove to you
That nothing of itself is carried up,
Or mounts aloft: lest in this matter flame
May lead you into error: naturally
It still tends upwards, and with added strength:

ON THE NATURE OF THINGS

ii., 189-215.

And so do goodly crops and trees, although
What weight they have, would draw them down
to earth.

Nor when fires leap upon the house's roofs
And with swift flames lick beams and rafters up,
Are we to think they do it of themselves,
Without some force behind? In the same way
Escaping from a wound blood spurts and springs
Aloft, and scatters gore. Do you not see
The water with what strength it drives from out
Its depths stray logs and beams? The more we
push

Them down, and press them back with all our force
And might and main, and many though we be,
More eager is the stream to throw them back
And send them to the surface once again,
So much that half their length is in the air;
And yet who doubts that of themselves they would
Be carried downward through the mighty Void?
So flames, too, driven upwards still should rise
To upper air, although what weight they have
Would strive to draw them down. And see you
not

The mighty meteors that fly aloft
Draw after them long trails of flame towards
Wherever Nature gives them leave to go?
See you not stars and constellations fall?
The sun, too, from the zenith sheds its heat
On every side, and sows the fields with light:
So to the earth as well his heat still tends.
You see the lightnings flash across the storm,
From this side, now from that, the flames burst
forth

From out the clouds, still falling to the earth.

T. LUCRETIUS CARUS

ii., 216-242.

The swerve
of the
atoms.

And this, too, understand: when bodies thus
Are borne sheer down through void by their own
weight,

At times and points of space unfixed, they swerve *
A little from their line, just so much as
That you can mark the change. If 'twere not so
They all would fall just like the drops of rain
Straight through the void: there would have been
no clash,

No blow inflicted on the seeds, and so
Had Nature ne'er begotten aught at all.

All things in
void fall at
the same
pace.

And yet if any think that heavier seeds,
More quickly borne through void, can fall from
high

And blows inflict, which motion can beget,
He wanders from the truth. For when seeds fall
Through water and thin air, they take their speed
According to their weight, because 'tis clear
The volume of the water and thin air
Resist not everything with equal strength,
But yield more quickly to the greater weights:
Void, on the other hand, can ne'er resist
At any time or place, but must give way
As Nature asks: and all things must perforce
Be moved and borne along at equal pace,
Although of different weights. So heavier things
Will never fall on lighter from above,
Nor blows inflict sufficient to produce
The motions by which Nature all begets.

* This is a very interesting detail of Lucretius' philosophy. Man, he recognises, is, as Milton says, 'with free-will armed,' and so, if he is not to be powerless in the face of the fixed forces of nature, never deviating from law, some alternative there must be, which he provides in this swerve or declination of the atoms from their fixed path. Cf. line 257.

ON THE NATURE OF THINGS

ii., 243-265.

Therefore again, and yet again, I say
Bodies must swerve a little, but not much,
Lest we should think their motions are oblique,
Which facts deny. For this is evident
That weights can never of their own accord
Travel obliquely, falling from above,
As far as you can see: yet who can say
That nothing ever swerves from the straight
course?

The swerve
accounts
for free
motion in
things.

Again, if motions still are linked together,
A new one strictly following that before,
And germs do not by swerving make anew
A fresh departure, which will violate
The stern decrees of fate, and that one cause
Follows not on another in a round
Unending: whence, I pray you, whence is it
That free-will* has been wrested from the fates
For all mankind, and that we still can go
At no determined time, no fixed place,
Just where our will may lead, and turn aside
This way or that, at prompting of the mind?
For sure without a doubt 'tis will that makes
The first beginning, and the motion gives
To all our members. Why, have you not seen,
At races when the barriers are thrown down,
At a fixed time, the horses cannot start
So soon, however eager, as they wish?

* Cf. Tennyson, *De Profundis*, *ad fin.* :

'This main miracle that thou art thou

With power on thine own act and on the world.'

Epicurus always maintained the doctrine of free-will in opposition to the everlasting necessity of Democritus and other philosophers. The device of the declination of the atoms in their course, by which it was to be maintained, Cicero terms, '*res tota ficta pueriliter.*' Yet, as Munro says, there is something grand and poetical in its very simplicity.

T. LUCRETIUS CARUS

ii., 206-294.

No, the whole store of matter through their frame
Must be sought out, stirred up through all the
limbs,

That it may obey the motions of the mind.
Of these the heart is first the origin :

The action first commences with the will,
And then transmits itself through every part.
Quite different is it when we move propelled
By blows inflicted by another's strength
Against our wishes, till the will has reined
It in. So see you not that though oftentimes
Some outward force can drive men, and compel
Them onward 'gainst their will in headlong
course,

Yet in our breast there something still remains
Which struggles and resists? A something which
When it thinks right, can change the state of
things,

And can control and check ; and in its course
The store of matter through the limbs and frame
Is oft reined in, and settles back again.
And so in germs we must admit as well
There is another cause of motion there,
Than merely blows and weights : whence we
derive

Our power to act : for naught from naught can
come.

For weight forbids that all things should be done
By blows of outside force : yet lest the mind
Should feel within a stern necessity
In all it does, and like a conquered thing
Be forced to bear and suffer what it must,
From time to time, at no fixed place these seeds
Swerve from their usual course.

ON THE NATURE OF THINGS

ii., 295-325.

The sum of
motion is un-
changeable.

Nor was the mass

Of matter e'er more closely packed, nor yet
More loose with larger intervals of space:
It cannot grow or dwindle. So the seeds
To-day have the same motion, that they had
In days gone by, and will have to the end:
What was begot will be begotten still
On the same law: will be, will grow and wax
As long as Nature's laws permit to each.
No force can change the universe: for naught
There is beyond to which escape can be,
Nor whence new force can now be introduced
And rush upon the scene, and change the laws
Of Nature, and its motions so confound.

Illustrations
of the fact
that the
atoms are
in constant
motion.

Nor need you wonder while the seeds are all
In constant motion, that the universe
Seems still at rest, save where some part may
move

In its own sphere: for from our senses far
The nature of these primal atoms lies:
Since they're beyond our sight, their motions too
Must be beyond our ken, and all the more
Since what you see its movement oft conceals,
By the very distance from us that it lies.
Thus oft on the hillside the woolly flocks,
Cropping the gladsome mead, creep slowly on,
Where'er the grass with pearly dew invites,
And the lambs full-fed sport round, and butt each
other

In sparkling play: you only see the mass,
It rests on the green hill a spot of white.
Again, when mighty legions fill the plain
In mimicry of war, the flash of arms
Then rises to the sky, the Earth itself

T. LUCRETIUS CARUS

ii., 326-356.

Is bright with brass, and underneath arise
The sounds of many feet of marching men :
The mountains struck by shouting of the host
Re-echo it aloft among the stars,
While horsemen fly around, and dart across
The plain that trembles with their eager charge ;
And yet there is a place on the high hills,
From which they seem to stand, a single spot
Of brightness on the plain.

Variety of
shapes in
atoms.

Now mark and see

The nature of these primal atoms, how
They differ in their forms and varying shapes,
Not but that many are the same, yet as
A rule they're not alike. No wonder 'tis :
For since they are so many, as I've shown
And know no end, no sum, it needs must be
They cannot all be framed of the same bulk,
Or yet in figure like. The race of man,
The scaly tribes that mutely swim the sea,
The happy flocks, the wild beasts and the birds
Of varied form which haunt the watery spots
By river banks, and springs, and lakes, and fly
In throngs amid the pathless woods, go take
Which one of these you like, and you will find
Each differs from the other. Only thus
Could offspring recognise their mother, or
She them, as all we see can do, nor less
Than man they know the noted marks of each.
Thus oft before the temples of the Gods
Beside the altars, where the incense burns,
A calf will fall, and throw up streams of blood
Warm from its breast: meanwhile the widowed
dam

Ranging the verdant meadows, knows the marks

ON THE NATURE OF THINGS

ii., 357-387.

Of cloven hoofs upon the ground, and scans
With eager eyes the place around, to see
If anywhere she find her missing young :
The leafy woods she fills with her complaints,
Then pauses, and anon returns again
Pierced to the heart to the deserted stall
With longing for the child she sees no more :
Not the soft willows, nor the dew-clad grass,
Nor rivers gliding level with their banks,
Can soothe her heart, or take away her pang :
Nor other calves still roaming in the fields
Can then divert her mind or ease her pain,
So plain it is she seeks for something known
Peculiar to herself. The tender kids
With tremulous voices hail their hornèd dams,
The butting lambs the flocks of bleating sheep :
And run by nature to their mothers' milk.
Just so in corn you'll find that every grain
Is still unlike another, and there is
In each a difference of form. And shells
That beautify the lap of earth, where'er
The sea with rippling waves beats on the shore,
The winding shore all edged with thirsty sands,
These all are made we see on the same rule.
Wherefore I say again these seeds thus made
By nature, and not coming from the hand
Of man according to a single stamp,
Must oft be found to differ in their form.
And hence a reason's seen why lightning's flame
Can penetrate far further than can ours
On earth of pine: for you may say that it
With its subtle force is formed of smaller parts
And passes chinks our fire cannot get through,
Born as it is of wood and sprung from pine.

Results
of their
variety.

T. LUCRETIUS CARUS

ii., 388-417.

The light again will pass through horn, the rain
Is thrown aside: why is it so, unless
The parts of light are smaller sure than those
Of which the showers of nurturing rain are made?
The wine flows quickly through the strainer still,
The olive oil is slow, because, I think,
The parts are larger, hooked, more closely twined:
And so it is these primal germs cannot
So quickly be disjoined from one another,
And make their way through little openings.
Honey and milk in a like way produce
A pleasant taste upon the tongue, when held
Within the mouth: but wormwood foul and harsh
Centaury make the mouth to writhe and twist
With sheer disgust: so you may easily see
Those things are made of rounder, smoother parts,
Which touch our senses pleasantly: whereas
Those which are harsh and bitter are composed
Of parts more hooked and rough, which tear their
way

Into our senses, entering make a wound.

Further
results of
variety of
shape.

All things in fine which pleasant are to sense,
And those which to the touch are rough, still fight
Together as of different shape and form.

Lest you should think the grating of a saw
With its harsh sound 's composed of parts as
smooth,

As the sweet airs musicians wake to life
With nimble fingers on the strings: or that
The seeds which reach men's nostrils when they
burn

Foul rotting carcasses, and when the stage
Is sprinkled with Cilician saffron, while
Panchæan odours from the altars rise,

ON THE NATURE OF THINGS

ii., 418-450.

Are like: or else decide the colours bright
 Which please the eye are formed of the same seeds
 As those which make the pupil smart, and draw
 Tears from the eyes, or from their foul aspect
 Look horrid, loathsome. All the shapes that please
 Our senses have been formed of something smooth,
 Those that are foul and harsh have been produced
 With roughness in their build, and some there are
 Not smooth, nor altogether hooked with points
 Like barbs, but angular in shape, their sides
 Projecting out, which tickle more than hurt
 The sense, such are the lees of wine, the sauce
 Of Elicampane formed. That burning fire
 And chilly frost are differently toothed,
 To affect our senses, touch itself can prove.
 Yes, touch, ye Powers Divine on high,
 Touch is the bodies' sense, when things outside
 Attempt to penetrate, or things within
 Give pain or joy, emerging at the will
 Of Venus Goddess who o'er birth presides:
 Or when the seeds disturbance breed within
 And shock the sense, as you might easily try
 By striking on your body with your hand.
 The seeds which can produce such different things
 Must sure be formed of shapes dissimilar.

Further
 differences
 of shape.

And further there are things which seem both
 hard

And dense, and these are joined of parts, more
 hooked,

And intertwined with branches. First 'mongst these
 Are the adamantine rocks, inured to blows,
 And solid flints, and iron's strength, and bolts
 Of brass, which creak within their grooves. But
 those

T. LUCRETIVS CARUS

ii., 451-482.

Which liquid are, of fluid form must still
Consist of things more smooth and round, for so
The several drops are not so close combined,
And in their onward course flow easily down.
And all things which you see at once disperse
As smoke and mist and flame, if they do not
Consist of bodies small and round, must still
Not be held fast by intertwining seeds;
That they may pierce the body, find a way
With biting force, and yet not cling together.
Thus you may know what of this sort we see,
Which when presented to the senses thus
Are formed of pointed, not of tangled seeds.
Yet do not hold it strange that fluid things,
Like the sea spray, are bitter: in as far
As they are fluid they're composed of seeds
Both smooth and round, and yet some rough ones
are

Mixed up with these, producing pain, not hooked
Enough to hang together, but though rough
They're round, and while they swiftly roll can hurt
The sense. That you more easily believe
The bitterness of Neptune's water comes
From these rough bodies, there are means employed
To separate the parts, as you see when
Fresh water's often filtered through the earth,
It flows into a trench, and grows quite sweet;
It leaves the bitter elements behind,
Which, being rough, more easily can stay.

But
variety of
shapes
limited.

Now I have taught you this, I will go on
To add a truth depending upon it.
The germs have varied shapes, but still they are
In number finite. If it were not so
Some ^{atoms} germs must be unlimited in size,

ON THE NATURE OF THINGS

ii., 483-516.

For in the small ones it is easily clear
They cannot vary much; assume, we'll say,
That these first bodies three least parts contain,
Or add to that a few, when you have placed
Them all at top or bottom, right or left,
And tried them every way to see what shape
The varied order gives, and if you wish
Yet other shapes to get, you'll have to add
Still other parts, which will again require
Still more if you should wish to vary them;
Increase of bulk then follows on new shapes:
Therefore you cannot possibly believe,
That germs are infinite in form, or else
They'd be of monstrous size, which can't be proved.
If 'twere so then barbaric robes,* and cloths
Of radiant Melibœan purple, dyed
From bright Thessalian shells, and the golden
brood

Of peacocks steeped in bright and gaudy hues
Would little count, surpassed by fresher tints:
Despised the scent of myrrh, the honey sweet,
The songs of swans, and Phœbus' varied airs
Along the strings would into silence die:
For something fresh would still replace the one
That went before. Indeed we might ev'n fall
From bad to worse, not better: still there'd be
Something more noisome to nose, ear, and eye
And taste as well: and since it is not so,
Since certain things have certain limits fixed,
It follows too the numbers of the shapes
Is finite. So from fire to chilly frost
There is a path traced out, which has to be

* Cf. Milton, *Paradise Lost*, ii. 4, has 'barbaric pearl and gold.
Melibœa was a town in Thessaly.

T. LUCRETIUS CARUS

ii., 517-550.

Retravelled still: there's cold and heat and then
The moderate warmth between, which goes to form
The united whole. Thus things created differ
By settled plan, marked out on either side,
On this by flames, on that by stiffening frosts.

Atoms of
one shape
infinite in
number.

Now for another truth which rests on this.
The germs of things, which are in shape alike,
Are infinite: for since the difference of forms

Is finite, those which are alike must be

In number infinite, or else the whole

Would finite be, which I have shewn to you

Is not the case, teaching as I have done

In pleasant verse how these small germs maintain

From endless time the universe of things,

Through blows for ever dealt on every side.

For though you see some creatures are more rare,

Less fruitful, in another clime and place

In distant lands, there may be many such

To make the number up: just as we see

'Mong quadrupeds snake-handed elephants,

By whom in thousands India's fenced about,

By an ivory wall, that none can enter in,

So numerous are they, here they're seldom seen.

But even if I grant you at your will

Something unique, naught like it ever known,

With its own body quite distinct, yet still

Unless there be an infinite supply

Of matter to beget it, it must cease,

And what is more can neither grow, nor feed.

Assume that through the universe the seeds

Of some one thing are ever tossed about

In finite numbers, whence, where, by what force

In what way shall they meet, combine themselves

In such a sea of matter, such a throng?

ON THE NATURE OF THINGS

ii., 551-578.

They can't unite, methinks: but just as 'tis
When shipwrecks great and many have occurred,
The surging sea throws up the rowers' seats,
The rudders, yards, prow, masts, and floating oars,
The wreckage seen on every shore and coast,
A warning given to men to shun the snares,
The guile and violence of the faithless deep,
Never to trust to it, ev'n when there smiles
With specious promises the placid sea.*

Thus if you once decide that certain seeds
Are finite, they for ever must be spread
Abroad, and scattered wide by many tides
Of diverse matter, never to combine,
Or stay together, or have further growth.
But facts assure us it is really so,
That things can be produced, and then can grow:
In any class 'tis clear that there are seeds
In numbers infinite supplying all.

Creation and
destruction
go hand in
hand.

And so death-dealing motions cannot still
Prevail, nor always life destroy, nor yet
Can those which give increase and birth avail
To keep alive for ever what's begot.

X An equal fight is ever going on,
Which has been waged from long eternity
With doubtful issue: here or there life wins,
And is in turn o'ermastered: with the cry
That children raise when first they see the light,
Mingles the funeral chant: nor does a night†

* Cf. Watson, *Peace and War*, ii. 6:

'The sleek sea gorged and sated basking lies;
The cruel creature fawns and blinks and purrs
And almost we forget what fangs are hers
And trust for once her emerald-golden eyes.'

† Cf. Tennyson, *In Memoriam*, vi.

'Never morning wore
To evening, but some heart did break.'

T. LUCRETII CARUS

ii., 579-605.

E'er follow day, or dawn succeed to night
That heard not mingling with the sick one's
cries

The wails that wait on death and funerals.

And here 'tis well that you should mark and
bear

Ever in mind that nothing we can see
Consists entirely of one form of seeds,
Without admixture. And whatever has
Within it many powers and properties
Must have most seeds, those of most varied forms.
The earth has such within it, which renew
From cooling streams for aye the unmeasured
main:

Others again whence fires arise: for note
The crust of Earth in many places burns,
While Ætna's fury flames from depths pro-
found.*

Then other seeds she has which can supply
Bright crops and goodly trees for race of man
And flowing streams, and verdant meads to glad
The savage beasts that wander on the hills.

Hence she is termed the mother of the gods
The common mother both of beasts and men.

Of her† it is the old poets of the Greeks
Have sung, how she on chariot raised aloft
Drives lions yoked, so teaching that the world
Hangs in the spacious air, and has no prop
Of earth for its support. The wild beasts show
A race however savage can be tamed

* Read *ex imis* for *eximiis*.

† The worship of the mighty Mother was brought to Rome from Phrygia in 204 B.C. during the war with Hannibal, in obedience to an oracle from Delphi.

Earth is
composed of
every kind
of atoms.

Worship of
Mother
Earth as
Cybele.

ON THE NATURE OF THINGS

ii., 606-618.

By parent's kindness. On her head she wears *
A towered crown to show that she maintains
Our towns, embattled high on lofty heights,
And, with this sign adorned, through many lands
In dread is borne the Godlike mother's form.
Her mighty nations with old antique rites
Idæan Mother term, and give her bands
Of Phrygian dames for escort, since they say
From there at first corn came for food of man.
They give her mutilated priests to show
That they who treat the mother with neglect,
And to their parents prove ungrateful, are
Unworthy to have children of their own.
Tense tambourines and hollow cymbals round

* Cf. Spenser, *Faerie Queene*, iv. 11, 28:

'Old Cybele arrayed with pompous pride
Wearing a diadem embattled wide
With hundred turrets like a turribant.'

Where turribant = turban.

And Keats' *Endymion*, ii., imitated from Ovid, *Metam.* x. 696:

'Forth from a ragged arch, in the dusk below,
Came Mother Cybele! alone, alone—
In sombre chariot; dark foldings thrown
About her majesty, and front death-pale,
With turrets crowned. Four maned lions hale
The sluggish wheels: solemn their toothed maws,
Their surly eyes brow-hidden, heavy paws
Uplifted drowsily, and nerry tails
Lowering their tawny brushes. Silent sails
This shadowy queen athwart, and faints away
In another gloomy arch.'

Wordsworth, *Processions, Knight*, vi. 270:

'A deeper dread
Scattered on all sides by the hideous jaws
Of Corybantian cymbals, while the head
Of Cybele was seen sublimely turreted!'

Why the *Magna Mater* wore a tower cf. Ovid, *Fasti*, IV. 219.

'At eur turriferâ caput est ornata coronâ?
An Phrygiis turres urbibus illa dedit?'

T. LUCRETIUS CARUS

ii., 619-645.

Re-echo to their hands, what time the horns
Hoarse-sounding threaten, and the hollow pipe
With Phrygian numbers fills the soul with dread.
Weapons they carry, symbols of their wrath,
To strike the ungrateful hearts, of the impious
throng

With dread of what the Goddess' might may do.
As therefore through great cities borne along
A silent blessing mutely she bestows:
With bronze and silver all her paths are strewed:
And bounteous alms men give: and scatter wreaths
Of roses hiding her and all her train.
Here is an armed band that's called by Greeks
The Phrygian Curetes, who in turn
Join in the game, and dripping o'er with blood
Leap up in measure to the tune, and shake
Their nodding terror-striking crests on high:
They are Dictæan priests, who once are said
To have drowned in Crete the infant cry of
Jove:

While the armed boys, in rapid dance around
The child, beat brass on brass with measured
tread,

Lest Saturn might consign him to his jaws,
And stab his mother's heart with endless pain.
And thus it is they still escort in arms
The mighty mother, or it is because
They wish to show the Goddess still commands
That men should wish to defend their country's
cause

By arms and valour, and be ready too
To be their parents' guide and ornament.

The Gods
live a life
apart from

Yet this, however beautifully expressed
And well contrived, is far away from truth.

ON THE NATURE OF THINGS

ii., 646-672.

*For Gods must ever of necessity
Enjoy immortal life, complete repose
Far, far away, withdrawn from our concerns,
Unwitting pain, from care and danger free,
Strong in themselves, nor wanting aught of us:
Our favours touch them not, nor our ill deeds
Arouse their anger. Here if any think
To call the sea by Neptune's title, corn
From Ceres, Bacchus' name misuse instead
Of that which properly belongs to wine:
Well be it so, and let him further say
The Earth is mother of the Gods, if but
He free his soul from superstition's ties
Disgraceful to be borne. Earth feels it not,
She has no sense of what these things may be,
And having in herself the seeds of things
She brings them to the light in many ways.

All things
contain
atoms of
various
shapes.

And so the woolly flocks, the martial steeds,
The hornèd herds, beneath heaven's canopy
Cropping the grass within the selfsame field,
Slaking their thirst from the same flowing stream,
Are different in type, and still retain
Their parents' character, and imitate
The ways of each. So great the difference is
In every kind of herb, in streams as well.
And so whatever animal you take,
Bones, blood and veins, and heat and moisture,
flesh
And sinews form the whole, yet all unlike,
And made from seeds dissimilar in shape.

* This passage was quoted by Mr. Gladstone, in the House of Commons, in his speech on the Affirmation Bill, April 23, 1883—perhaps the first, and certainly the last time Lucretius ever had the honour of being so used in that place.

T. LUCRETIUS CARUS

ii., 673-702.

Again, whatever's set on fire and burned
Stores up, if nothing else, at least the means
To throw out fire, and send out light, and set
Fresh sparks in motion, and fresh embers too.
If you'll apply like methods to the rest
You'll find they still conceal the seeds within
Of many things, of very various shapes.
Again, you meet with many things that have
Colour and taste and smell. Their properties
Must in each case be severally made
Of elements of different shapes. For smell
Is found where colour's not perceived ;
Colour in one way, taste in quite another
Affect the senses, so that you may know
They differ in the shapes that go to form them.
So different shapes are formed into a mass,
And things are made by mixture of the seed.
So in our verses many letters are
Common to many words, although you must
Admit the verses and the words are formed
Of different elements: not but there are
Many in common which run through them all,
Or that there are no two composed the same:
But that for most part they are quite unlike
The one the other. Thus in many things
There are many seeds in common, yet they make
A whole that's quite unlike in all its parts,
So that quite truly you may say that man,
And corn, and pleasant trees do all consist
Of different elements.

But all combinations
are not
possible.

Nor yet must we
Suppose that all things may be joined together
In every way: for then you would arrive
At prodigies, half-man, half-beast, or p'raps

ON THE NATURE OF THINGS

ii., 703-731.

Tall boughs protruding from a living form,
Limbs of land-creatures mixed with limbs of those
That live at sea, while nature too would find
Chimæras spouting flame with foetid mouth
Throughout the fruitful lands. Yet it is plain
That such things are not done: since still we see
That all things that are born of certain seeds
And certain mothers, growing, keep their kind,
And surely this is by a fixed law,
For thus into our frame from all our food
Pass bodies fit for each particular part:
There they unite fit motions to provide.
Nature herself on the other hand rejects
Those that are alien: and many things
Fly from our frame unseen, impelled by blows,
Such as could not fit into any part,
Nor, when within, agree with and adopt
The fitting motions. Lest you should suppose
These laws apply to living things alone,
Know they are universal in their scope.
For as begotten things are all unlike,
They each consist of seeds unlike: not but
That many are in shape the same, but that
They are not like each other as a rule.
And as the seeds do differ, so there must
Be difference in the space that lies between,
In the ways, the meetings, and the weights and
blows,
The clashings and the motions: all of which
Disjoin not only living things, but keep
Apart the land and sea, the sky and earth.

the seeds
have no
colour.

Now mark my precepts, stored by welcome toil,
Lest you should think the bright things which you
see

T. LUCRETII CARUS

ii., 732-767.

Are from white seeds, and black ones from the
black;

Or those of any other shade you like
To take their shade from seeds of similar hue.
The seeds no colour have at all, unlike
Or like, yet if you fancy that the mind
Can clothe them not with colour, you are wrong.
Why, men born blind, who've never seen the light,
Know bodies by the touch, and so you know
That bodies colourless from earliest days
Can come within our ken, although they are
Of colour wholly void. So we ourselves
See not the colour of the things we touch
In darkness. Having proved this, I proceed
To show there are things, which from earliest days
Have had no colour, and have so remained.
For colour may be changed to any other,
But primal germs change not: whate'er 's to last
Ne'er suffers change, lest all things end in naught.
Whate'er by change deserts its settled bounds,
Death then ensues to that which was before,
So do not dye the seeds with colour, lest
The whole return to nothingness again.

Their colour
depends on
variety of
shape

Besides if seeds are colourless and yet
Endowed with varied forms, from out of which
Still various colours come and change about
According to the change of seed, and how
They're placed, what motions they can give, or
what

Receive, you can explain at once why those
Which once were black become exceeding white,
Of marble whiteness: as you see the sea
When mighty storms have stirred it to its depth,
Is lashed to waves as white as marble is.

ON THE NATURE OF THINGS

ii., 768-801.

You may perhaps say, when that which once was
black,

Is mixed anew, its seeds in order changed,
Some added, some removed, that then it comes
That it is bright and white. But if the sea
Was formed of azure seeds, it never could
Be white at all. However you disturb
Seeds which are blue, you cannot make them
white.

But if the seeds which make the sea so bright
Are dyed of various colours, just as oft
From different forms and shapes a square is made
Of figure uniform, it might well be
That in the square we'd see dissimilar forms:
So in the sea as well, or in aught else
Of pure and single brightness, you would find
Quite varied colours differing 'mong themselves.
The different figures don't prevent the square
From being a square, but different colours do
Prevent the whole being uniformly white.

Then too the reason prompting us to give
Colour to seeds falls to the ground, since white
Do not proceed from white, nor black from black,
But rather come from those of various hue:
For white things much more readily occur
From those which have no colour, than from black
Or any other opposite to it.

Again, since colours cannot be, unless
There's light, and germs ne'er see the light, you
may

Be sure they have no colour. How indeed
Can colour be in darkness? Nay, itself
Is changed according as the light may strike
With straight or oblique ray. So the dove's plume

So there is
no reason for
assigning
colour to
seeds.

Colour is
dependent
on light.

T. LUCRETIVS CARVS

ii., 802-838.

Which crowns its neck and head shows in the sun;
At one time it is red, as garnets are,
And then again it vies with emeralds green
And coral red. The peacock's tail as well
When filled with light changes its colour too,
Against the sun. And since these colours are
Produced by light, they cannot come without it.
And since the pupil by a kind of blow
Perceives or white or black or other hue,
And since it boots not what the hue may be,
But what the shape, it sure is clear that seeds
Require no colours, but are recognised
By touch depending on the shape they have.

Besides, since no fixed colour is assigned
To different shapes, and all the forms of germs
Exist in any colour, why, I pray,
Are not the things they form, in a like way
Endowed with every colour? Sure 'twere right
That crows in flight should white appear below
From wings of white, and swans in turn be black
From a black seed, or any other hue.

The smaller
a body is the
less colour
it has.

Again, the smaller that the parts may be
You rend things into, more you will perceive
The colours fade and die: as if a cloth
Of gold is rent in shreds, when thread by thread
It's plucked, the purple and the scarlet hues
Most brilliant of all are quite dispersed:
You may infer the shreds their colour lose
Before they come back to the primordial seeds.

Many things
have neither
smell nor
sound.

Lastly, since you agree all bodies don't
Possess a voice and smell, you do not give
To all both sounds and odours. And so too,
Since that our eyes cannot see everything,
You thus may learn some things there are deprived

ON THE NATURE OF THINGS

ii., 839-871.

Of colour, as much as others are of smell
And sound, and yet the clever mind can know
These things as well as others it discerns,
Which other qualities do not possess.

Seeds are
without
heat, sound,
taste, or
smell.

But here, lest haply you suppose that seeds
Lack colour only, know they are devoid
Of warmth and cold and burning heat as well:
Are without sound and moisture, nor emit
From their own body smell. As when you seek
To make sweet draught of myrrh and marjoram
And flower of spikenard smelling nectar-like,
You first must get, if possibly you can,
Some scentless oil, that gives no perfume out,
That it as little as is possible
Destroy by its own pungency the scents
Mixed with it in the boiling. So the seeds
Which do beget things, must have neither smell,
Nor sound, since naught they can emit themselves
Nor any taste, nor cold, or heat at all.
For as they all, of whatsoever sort, must die
Whether they be of body pliant, soft,
Brittle and crumbling, porous or what not;
They all must be disjoined from the primal seeds
And separated quite, if 'tis our aim
To give to things foundations that will last,
On which the universe may safely stand,
That things may not return to naught again.

Neither
have they
sense.

Another point. Whatever things you see
Have sense, must be composed of elements
That do not feel; facts prove it to be so,
Nor does our knowledge contradict the view;
But rather takes us by the hand, and bids
Us think that living things are still composed
Of those that have no sense. Do we not see

ii., 872-904.

That living worms are born of stinking dung,
 When the moist earth soaked with torrential rains
 Has rotted? all things change in the same way;
 Rivers and leaves, and pastures into herds,
 And herds again into our human frame;
 Aye, and from these wild beasts too gain their
 strength

And they of pinion strong. And so it is
 That nature turns all food to living things
 And gives them all their sense, just as again
 She turns dry wood to flame, and all to fire.
 Now do you see what difference it makes
 In what positions seeds may first be ranged,
 How they are mixed, what motions give, receive?

That
 sensible
 things do not
 usually arise
 from the
 insensible is
 no objection.

And then what is it that strikes on your mind
 And moves it to put forth fresh arguments,
 Why you should not believe that things that feel,
 Are born of senseless things? Sure 'tis that stones
 And wood and earth, however mixed they be,
 Can never give us sense. Yet here 'twere well
 To note I do not say that everything
 Which is producing, can at once beget
 This sense and feeling: but that it matters much
 How small the things may be which sense produce,
 What shape they take, how moved, and how
 arranged.

Nothing of this we see in logs or clods:
 Yet even those we see when rotten grown
 Through rain produce the worms, because the store
 Of matter has been changed, combined anew,
 As it is when living things are to be born.
 Next they who hold that things possessing sense
 From like are born, in that case think that these
 Must still be soft, for sense is always joined

ON THE NATURE OF THINGS

ii., 905-936.

To flesh and nerves and veins, which still we see
Are soft, of mortal body. Yet even if
We think that these remain eternally,
Either they have the sense attaching to
Some part, or else they must be deemed to have
The sense belonging to all living things.
But surely not alone the parts have sense:
Each looks to something else: the hand alone
Parted from us no feeling has: nor can
The other parts feel of themselves: and so
They're like to other living things, they feel
As we, that they may work in concert still
With the vital sense. How then can it be said
That they're the germs of things, and shun the
paths

Of death, since after all they are but living things,
And living things are mortal, all of them?
Nay, could they do it, by their union
And close companionship they would affect
Naught but a jumbled crowd of living things:
Just as you know men, herds, and savage beasts
Can naught beget by union. If they should
Their own sense lay aside, another's take,
What use in having it? Besides there is
The point we urged, that chicks from eggs appear,
And worms burst forth when with torrential rains
The earth has rotted, all these go to prove
Feeling can come from that which does not feel.

Sensation
cannot come
from the
insensate by
change on
birth.

But if one say that feeling comes from that
Which has none, by a sort of change, or else
Because it is begotten by a kind
Of birth, enough to show and make it plain
There is no birth without an union first,
No change until the germs have met together.

T. LUCRETIUS CARUS

ii., 937-971.

No body can have feeling till it's born :
Because the germs lie scattered everywhere,
In air and rivers, earth and things of earth,
And till they meet and coalesce, there are
No vital motions to call into play
In every living thing omniscient sense.

Blows put
an end to
sensation.

Again a blow too strong for its nature comes
On any living creature suddenly,
Destroys its life, and stuns its every sense
Of mind and body : all the seeds dissolved
And vital motions stopped, until at length
The matter widely scattered through the whole
Unties the vital fastenings of the soul,
Disperses it abroad and drives it out
Through every pore. For what do we suppose
A blow can do, than shake and disunite
The various elements? Yet sometimes too
When the blow is less severe, what's left of life
May oft prevail, prevail, I say, and still
The tumult that's occasioned by the blow,
Recall each function to its proper place,
Shake off death's hand now ruling in the frame,
And light again the sense that almost failed.
How else could it regathering strength of mind
Return to life, death's threshold nearly crossed,
Rather than pass beyond, and disappear?

The seeds
themselves
feel nothing.

Besides, since there is pain when matter's germs,
Shaken by blows through living flesh and frame,
Quake in their seats within, and then again,
When they return, a quiet joy ensues,
From this you gather that the seeds themselves
Nor pain nor pleasure know : since that they are
Not formed of elements that change effects
Either with sorrow, or with gentle joy :

ON THE NATURE OF THINGS

ii., 972-1001.

Therefore it follows that they cannot feel.

That they
should do so
is absurd:
they would
need to
laugh and
cry.

Again, if we must needs believe that sense
Must still exist in germs, that living things
May have it too, what shall we say of those
Of which mankind specifically is formed?

For sure enough you must suppose that they
Shaken with rippling smiles can laugh aloud,
Sprinkle their face and cheeks with flowing tears,
Can talk of Nature and its laws, inquire
What are their origins: since they too must
Like other things, of other elements
Consist, which in their turn are born
Of others, so that nowhere you can stop:
Yes, sure, whatever you may say can speak
And laugh and think, I'll press you with the point,
That it is formed of things that do the same.
But if we see that this is foolish, mad,
That man, not made of laughing things, may laugh
And think and reason learnedly, although
Not formed of thinking, talking germs, then why
Should not these other things have sense, though

sprung

From union of things that have it not?

Earth then
is our
universal
mother.

Lastly, we all from heavenly seed are sprung,
All have one Father, and by Him the earth,
When it has drunk the falling showers of rain,
Brings forth and bears the goodly crops and trees,
And man himself, produces too wild beasts,
Providing food which makes them all to grow,
And lead a happy life, and bring forth young.
Wherefore of right she's termed our Mother Earth.
And what is born of earth to earth returns,
And that which came from heaven to heaven
ascends.

T. LUCRETII CARUS

ii., 1003-1035.

Nor does death kill, and make an end of things,
But disunites their union, joins anew
In combinations fresh, and so it is
Things change their shapes and colours and receive
Feelings, and in a moment yield them up:
So that from this you know, how much imports
With whom, and in what way these seeds combine,
What motions they may give, and what receive:
Nor must you think that that which we can see
Flitting upon the surface, now being born,
Now perishing again, can have their seat
Fixed deep within the world's eternal germs.
Ev'n in this verse of ours, it matters much
What elements it has, and how combined.
If all are not, the greater part you see
Are quite unlike: it is the way in which
They are disposed, that makes the difference.
And so in matter's elements it is,
Their unions, motions, orders, figures change,
And when they do, the things themselves change
too.

Do not be
alarmed at
new ideas.

And now, I pray, apply your mind to truth:
The question's new that seeks to gain your ears:
A new aspect of things declares itself,
Nought is so easy as that it can be
Quite grasped at once, and naught so great and
strange
But that quite soon men cease to wonder at it.
Look at the bright unsullied sky above,
The wandering constellations that it holds,
The moon, the sun's too dazzling light, if these
Were all at once presented to man's gaze
Quite unexpectedly, what could there be
More strange to be described, or more unlike

ON THE NATURE OF THINGS

ii., 1036-1061.

What people would believe? there could be naught:
So wonderful the sight. Yet no one now,
So tired are they with seeing, ever thinks
To gaze into the sky's unsullied vault.
Cease then to be alarmed at what is new,
And so reject the truth: but rather weigh
These things with your keen mind, and if they're
true,

Yield your assent, if not, then take the field
Against them. For the mind still seeks to know,
Since the universe is vast, unlimited,
Stretching beyond the ramparts of the world,
What is beyond, to which it can look forward,
And soar away in free unfettered flight.

There are
other worlds
than ours.

First then towards every part, on either side,
Above, below, throughout the universe
I've shown there is no bound: the fact itself
Aloud proclaims it, and the vast profound
Declares it is so. And we cannot think
It probable, when vast and boundless space
Yawns everywhere, and germs in the deep
profound

In number numberless* still fly around
In ceaseless motion driven, that this earth
And heaven alone have been created, while
The other atoms count for naught: the more
Since Nature made the world, and these same
germs

Clashing together of their own accord,
By chance in many ways, without design
Idly without result, at last by force
Have coalesced, and suddenly become

* Cf. Milton, *Paradise Regained*, iii. 306:

'He looked and saw what numbers numberless.'

T. LUCRETIVS CARUS

ii., 1062-1083.

The rudiments of mighty things, of earth
And sea, and sky, and every living thing.
And so you must admit there are elsewhere*
Unions of matter like to this we see,
Which Ether holds within its greedy grasp.

Nothing in
nature is
single or
unique.

Again, much matter being at hand with space
And naught to hinder, things must sure go on
And be completed. And if thus there be
Such store of germs, as life of living things
Can never reckon, if there be the force
And nature in them that can throw them each
To its own place, as they have thrown them here,
You must admit that there are other worlds
Elsewhere, and other races of mankind,
And wild beasts too.

Then in the universe
There's naught born single, single and alone,
But each is of some tribe, with others like.
First turn your mind to living things, and you
Will find that there is born the race of beasts
That roam the mountain heights, and then again
The race of men, and so in the same way
Dumb creatures wearing scales, and all the birds
That fly the air. Wherefore you must admit
That heaven and earth, sun, moon, and sea, and all
That is, are never single in their kind,
But rather are in numbers numberless:
Since these the clear-marked boundary of life
Awaits as much, and they are born just as

* The question of the Plurality of Worlds was the subject of a dispute between Dr. Whewell and Sir David Brewster. In 1853, the former published a treatise denying that other worlds are inhabited, to which Sir David replied with *More Worlds than One*, in which he claims to have Newton, Laplace, the Herschels, and Arago on his side.

ON THE NATURE OF THINGS

ii., 1089-1112.

Is every race on earth, which is produced
According to its kind.

Nature
works her-
self without
the aid of
the Gods.

And if these facts
You master in your mind, Nature at once
Enfranchised, rid of those who've ruled her long,
Of her own will, without the help of Gods
Can all things do. To them I do appeal
Whose tranquil spirits lead such placid lives,
Unruffled and at peace. I ask them who
Can rule the universe, or in his hand
Hold fast the reins that guide the deep profound,
Make all the heavens roll, or warm with fires
Ætherial all the fruitful lands that be
Or still at all times in all places be,
To fill the clouds with darkness, or to shake
The sky serene with thunder, or to hurl
The lightnings, oft his temples to destroy,
Or hiding in the desert far, to forge
The savage bolts, which pass the guilty by*
And slay the unoffending sons of earth?

Things grow
as long as
they take
in more
than they
lose: then
they die
down. Then
follows
decay and
death.

And since the birthday of the world, since first
The sea and earth and sun did thus appear
There have been many bodies from without
Joined to the mass, and many germs as well
Which the universe in tossing to and fro
Has brought together, whence the sea and land
Increase their substance, and heaven's house itself
Its borders can enlarge, and far above
The earth its lofty turrets raise on high,
And fresh air still surge round. For everywhere

* This is the old problem stated by the Psalmist, Ps. xxxvii. 35: 'I have seen the wicked in great prosperity, and flourishing like a green bay tree.' Monro quotes Seneca, *Nat. Quæst.*, ii. 46, who is asked: 'quare Juppiter aut ferienda transit, aut innoxia ferit,' and, as he says, prudently evades the question.

T. LUCRETII CARUS

ii., 1113-1139.

All bodies are distributed by blows
Each to his own, each to his proper class:
Moisture to moisture, earth to earth accrues,
Fires light fresh fires, and ether ether adds
Till Nature, universal parent, brings
With perfect skill its increase to an end.
This comes to pass, when now there's nothing more
Entering the veins of life, than that which flows
Away and passes off: then to them all
Life closes down, and Nature stops their growth.
For all the things you see increase and grow
With gladsome steps, and gradually reach
To full-grown years, still take unto themselves
More matter than they lose, so long as food
Is passed into their veins, and they are not
So widely scattered, as to lose their parts,
And more of waste incur than they can gain,
To feed their life: for sure we must admit
Much matter wastes and leaves them, yet there
must
Be other coming in until full growth
At length is reached. And then by slow degrees
Years break their strength, their vigorous growth
destroy,
And drag them downward to a dull decay.
Yes, for indeed the larger their increase,
The more they spread abroad with growing
strength,
The more the parts they shed, when growth is
stayed,
The less their food can nourish and augment:
There's not enough, so copious the discharge,
To reinforce and reinvigorate.
The duty 'tis of food still to renew,

ON THE NATURE OF THINGS

ii., 1140-1161.

To uphold the frame, refresh its waning strength :
'Tis all in vain : the veins can't hold enough,
And Nature fails to give what is required.
So all things die, when thus they waste away
By loss of matter, and succumb to blows,
Since food thus fails to our advancing years
And threatening forces never cease attack,
And seek to overpower by constant blows.
So too the walls of the great world around
Besieged will fall to ruin and decay.
Ev'n now the age has lost its force, the earth
Enfeebled scarce produces tiny things
Who once produced all creatures, and wild beasts
Of vast proportions. For methinks it was
No golden rope* let down from heaven above
The race of men to earth, 'twas not the sea
Nor ev'n the billows dashing on the rocks
Were his creators : no, 'twas Earth herself
Who bore them, as she nourishes them now.
Besides, of her own will she first prepared
The smiling harvests and the gladdening vine
For man : she gave sweet fruit and pastures gay :
Which now with all our toil scarce wax at all :
The oxen dwindle, and the farmers' strength
Ebbs fast away : unequal to our work
The plough of iron fails : so slow the crop
To come, so hard the toil. And now we see
The agèd ploughman shakes his head full oft,

* Cf. Homer's *Iliad*, viii. 19, where Zeus challenges the other gods to attach a rope to him and draw him down from heaven to earth :

'Let down our golden chain

And at it let all Deities their utmost strengths constrain
To draw me to the Earth from heaven : you never shall prevail
Though with your most contention, ye dare my state assail.'

T. LUCRETII CARUS

ii., 1165-1174.

That all in vain's the labour of his hands ;
And when he puts the present by the past,
His father's fate he blesses, oft repeats
How those of old, with piety fulfilled,
Lived easily upon some little plot,
As each man's share was smaller than to-day.
So he who plants the old and shrivelled vine
Full sad laments the movement of the times,
And wearies heaven with sighs, nor understands
That all things fade away by slow degrees
And reach the grave worn out by length of years.

ON THE NATURE OF THINGS

BOOK III.

iii., 1-18.

Praise of
Epicurus.

O H, thou who first could'st shed so bright a
light

On such black darkness, and make clear the needs
Of life, 'tis thee I follow as my guide,
Thou glory of the Greeks, and plant my steps*
In the prints that thou hast left, not that I hope
To rival, but in love to reproduce.

How could the swallow with the swan contend?
Or how could kids with trembling legs e'er vie
In racing with the horse's mighty power?

Thou, father, great discoverer of things,
Fit precepts givest us, and as the bees
Sip all things in the flowery brakes, so we,
From out the pages thou has left behind,
Feed on your golden maxims, golden still
And worthy to enjoy eternal life.

For when the system of thy godlike mind
The nature of the world did first declare
Fled are our superstitious terrors all,
Thrown down the world's ramparts, and I see

* Cf. Tennyson, *Lucretius*:

'I prest my footsteps into his.'

Lucretius has already spoken of his master, Epicurus (i. 62-79), as 'Graius homo,' and now continues his panegyric of him, which is repeated at the beginning of the fifth and sixth books. Epicurus was an Athenian citizen, born at Samos 342 B.C. Few men more lovable and more calculated to inspire enthusiasm have ever lived. There is a good account of his tenets in an essay by W. L. Courtney in *Hellenica*. No master ever found a more devoted follower than Epicurus did in Lucretius.

T. LUCRETII CARUS

iii., 17-36.

All things are moving through a mighty void.
 Comes into view the majesty of gods*
 In quiet abodes, where never comes the storm,
 No clouds to drench with rain, no snow congealed
 By bitter frost to harm with icy fall.
 A cloudless sky still shelters them, and smiles
 With light diffused around. Nature supplies
 Them all they need; and nothing e'er can mar
 Their peace of mind, while on the other hand
 Dread Acheron's mansions nowhere can be seen
 And death is never found in that abode.
 Nor yet does earth prevent us seeing all
 Whatever passes through the mighty void
 Beneath our feet. And when these things I see
 A Godlike pleasure mixed with awe I feel,
 That nature thus by all thy art laid bare
 Stands now revealed on every side to man.

The soul: its
 nature.
 Evils which
 follow on
 ignorance of
 its true
 nature and
 the fear of
 death.

And now I've taught these atoms' various kinds,
 What sort they are and how they're driven along,
 And how from them all other things are formed,
 Next after these my verse must now make clear
 The nature of the mind and soul, and see

* Cf. Tennyson, *Lucretius* :

'The Gods who haunt
 The lucid interspace of world and world,
 Where never creeps a cloud or moves a wind,
 Nor ever falls the least white star of snow,
 Nor ever lowest roll of thunder moans,
 Nor sound of human sorrow mounts to mar
 Their sacred everlasting calm!'

Cf. also Homer's *Odyssey*, vi. 42 (Morris's translation) :

'Where men say is the house of the Godfolk for ever firm and fast;
 And by no wind is it shaken, nor wet by the rainy drift,
 Nor the snow comes ever anigh it; but the utter cloudless lift
 Is spread o'er all: and white splendour runs through it every-
 where,
 And therein the Gods, the happy, all days in gladness wear.'

ON THE NATURE OF THINGS

iii., 37-57.

The dread of Acheron headlong driven forth,
Which troubles now the very life of man
To its inmost depths and all things overspreads
With death's dark pall, permits no pleasure here*
To be pure and unalloyed. And as to what
Men say as how diseases and disgrace
Are more to fear than the abysms of death,
How that they know the soul is made of blood,
Or wind perhaps, if so it chooses them,
And that they need not our philosophy:
You may perceive that all these boasts are made
For ostentation, not because they're true.
These very men exiled from their own land,
Far from the sight of men, live wretched lives,
Fouled by the stain of guilt, and sunk in care:
And yet where'er they come, the sacrifice†
They offer for the dead, and slay black sheep,
Propitiate the infernal deities,
And when the days are evil, turn themselves
With far more zest to what religion says.
So you can better test a man in days
Of danger, and know what he really is
When adverse storms do blow: truth then is forced

* Cf. Lucan, i. 455:

‘Quos ille timorum
Maximus haud urget, leti timor.’

† Cf. Sir I. Davies:

‘Who ever sees these irreligious men
With burden of a sickness weak and faint,
But hears them talking of religion then,
And vowing of their souls to every saint.’

This is an illustration of the old proverb, ‘The devil was sick, the devil a saint would be,’ which is borrowed from some mediæval Latin lines:

‘Ægrotat Dæmon, monachus tunc esse volebat:
Dæmon convaluit: Dæmon ut ante fuit.’

T. LUCRETII CARUS

iii., 58-84.

From his inmost heart: the mask is torn aside
The real man remains. Then avarice
And the blind love of honours, which compel
These wretched men to pass the bounds of right—
As partners, or as agents of fell crimes:
To strive by night and day to reach the top
With toil excessive, these, the sores of life,
Are chiefly fostered by the fear of death,
For foul disgrace, and bitter want are sure
Quite to forbid a happy, easy life,
And rather to be waiting, so to say,
Before the doors of death. And so while men
Driven on by false alarm would fly from these
And put them far away, they gain fresh wealth
By slaughter of their fellows, and amass
Great riches, ever heaping crime on crime:
Follow with joy a brother's funeral,
Shrink from and fear the board their kinsmen
spread.

'Tis this same fear that thinning envy stirs,
Because they see another bearing power,
Noted by all, arrayed in bright renown,
While they are wrapped in darkness and in dirt.
Some wear themselves to death because they wish
A statue or a title: oft again
From fear of death, disgust of life and light
Seizes on men, and with a saddened heart
They do themselves to death,* forgetting still
This fear it is which brings them all their care,
Puts shame to rout, bursts friendship's closest
bonds,
And tramples underfoot what duty bids.

* Cf. Martial, *Epigram*, ii. 80:

'Hoc rogo, non furor est, ne moriari, mori?'

ON THE NATURE OF THINGS

iii., 85-109.

Oft men their country have betrayed, and ev'n
Their very parents, seeking to avoid
The realms of Acheron. Ev'n as children fear
In darkness all things, and what's coming dread,
So we in daylight dread what is no more
Alarming than what children shudder at
When it is dark, and fancy sure to come.
This terror then, this darkness of the mind
'Tis not the sun, the glittering shafts of day,
Can dissipate, but nature's face and law.

Nature of
the mind.

*First then, I say, the mind which oft is called
The understanding, and in which there dwells
What guides and rules our life, is just as much
A part of man, as hands, and feet, and eyes
Are part of this whole living frame of ours.
Yet many wise have thought that sense in mind
Is placed in no particular part, but is
As 'twere a vital habit of the whole,
A mere harmonious working of the parts
Called by the Greeks a harmony; because
By it we live with sense, although nowhere
Is the intelligence distinctly placed.
Thus oft the body may be well, and yet
The health resides in no particular part
Of him who's well: just so they nowhere place
The sense of mind. Quite wrong, I think, they are.
Thus oft the body, which we see, is sick,
While in another place we cannot see
We feel that all is well: on the other hand
Sometimes the mind is sick, while we're quite well.

* Lucretius deals first with the 'animus' or rational part of the soul situated in the breast, and then in the next paragraph with the 'anima' which is diffused through the body, and is the cause of sensation. The two parts are identical in substance, and differ only in function.

T. LUCRETIUS CARUS

iii., 110-139.

'Tis just as when sometimes the foot is ill,
The head feels nothing. Then again when we
Have given our limbs to gentle slumbers chains,
And the tired body lies devoid of sense,
'Pour'd out in loosnesse on the grassy ground,'*
Something there is within, that still can feel
Joyful emotions, and the idle cares
That wring the heart. And now that you may
know

The soul is in the frame, and that it is
No harmony that makes us all to feel,
Note this, that when the body much has lost,
Life oft remains: while, on the other hand,
Remove some parts of heat, expel the air,
And life at once deserts the veins, and leaves
The bones behind: from which you may perceive
All bodies are not like in the part they play,
Nor equally contribute to our health:
But that those seeds, which bring us air and heat,
Bring life to us the most. There is then heat
And vital air within us, which bring death
When they depart to our decaying limbs.
Then since we thus have found the mind and soul
Are part of man, I pray you to give up
This notion of a harmony, a name
Musicians brought from lofty Helicon,
Or took from somewhere else, and so transferred
To what required a name. Whate'er it be,
Why let them keep it, and attend to me.

Mind and
soul are one
nature: but
the mind is
supreme.

Now mind and soul, I say, are both combined
And form one nature, but the guiding force,
The mind and the intelligence so called,
Is head of all, and rules the whole. It lies

* This line is taken from Spenser, *Fuerie Queen*, i. 7, 7.

ON THE NATURE OF THINGS

iii., 140-174.

Within the breast: here fear and terror throb,
Here joy can please: and therefore here you have
Intelligence and mind. The soul, the rest,
Dispersed throughout the body still obeys
The bidding and the movement of the mind.
It only knows, it can rejoice e'en when
There's naught to move the body or the soul.
And as when pain affects the head or eye,
The body does not suffer everywhere,
Just so the mind is pained or filled with joy,
Although the soul throughout the limbs and frame
Feels nothing new. But when the mind is stirred
More violently, then we see the soul
Respond in every member, sweat, grow pale,
Tongue falters, voice departs, the eyes grow dim
Ears ring with sounds, our limbs sink under us,
And men all terror-struck have oft fallen down.
So you can see the union 'twixt the soul
And mind, how when the latter moves it, then
It moves and stirs the body in its turn.

Mind and
soul have
bodies.

And the same reasoning shows the mind and soul
Have bodies: when it thus can move the limbs,
Arouse from sleep, and change the countenance,
And rule and guide the man, when none of these
Arrive except by touch, and touch implies
A body, must we not admit the mind
And soul have bodies? And besides you see
Our mind can suffer, and can feel just as
The body does. For when some weapon sharp,
Driven into bones and sinews by a blow,
Does not take life, yet faintness comes, we sink
Gently upon the ground, and there ensues
A fluttering of the mind, a sort of wish
To rise again. Then surely it must be

T. LUCRETIUS CARUS

iii., 175-213.

The mind a body has which suffers so
From bodies that inflict so sharp a blow.

They are
formed of
minute
atoms.

And what that body is, and whence it comes
I'll now explain. And first of all I say

It is extremely fine, of atoms small,

And most minute. That this is so is clear.

Nothing is seen so swift as is the mind,

When first it forms a plan, begins to act:

The mind you see more rapidly is stirred

Than aught we see in nature, and it must

Therefore consist of atoms very small

To be so easily moved. Thus water moves

And heaves quite easily, since that it is formed

Of particles that roll and move about,

But honey in its substance is more firm,

Its drops come slow, it flows less easily,

Because its particles are not so light,

So fine and round. A breath however light

Can force a lofty heap of poppy seed

To be dispersed abroad: Eurus himself

Can't stir a heap of stones. So bodies move

More easily when they are small and light.

But those which are of greater weight and rough,

These are more stable. And so since the mind

Is easily moved, it must consist of parts

Quite small, and smooth, and round. Which know-

ledge sure

Will be, my friend, most useful in your life.

This too will demonstrate how fine it is

In texture, and how small the space it fills

If gathered in one spot, for when the sleep,

The quiet sleep of death, has laid its hold

On man, and mind and soul have left his frame,

Naught you can see is altered in the form,

ON THE NATURE OF THINGS

iii., 214-245.

And naught in weight: death leaves it just the same,

Save in the vital sense, and in the heat.

And so the soul consists of minute seeds

Mixed with the veins, the sinews, and the flesh:

For when it's left the body, still the limbs

Remain the same in outward measurement,

And not a grain is lost in weight. Just as

When wine has lost its bouquet, or the scent

Of a pleasant perfume is diffused in air,

Or something else has lost its flavour, yet

The thing does not look smaller to the eye,

Nor aught has lost in weight: and just because

There are many atoms small and most minute

To give a taste and flavour to the whole.

And so again and yet again I say the mind

And soul of such small seeds are surely formed,

Since when it goes no weight at all is lost.

Composition
of the soul.

Yet you must not suppose its nature is

Quite simple. For at death a gentle breath,

Mingled with heat, the dying body leaves.

The heat implies there's air: for without air

Heat cannot be: for heat by nature rare

Must still with air be mixed. And so we find

The nature of the mind is threefold: yet

Ev'n these are not enough to give us sense.

Since facts have shewn that none of them can

give

Sensation, and the thoughts that make a man,

A fourth is added: 'tis without a name:

Naught is more nimble or more rare than it:

More formed of smooth small parts: 'tis this which

gives

Our frame sensation: for being formed this way

T. LUCRETIUS CARUS

iii., 246-282.

It is the first to stir: heat follows then,
And then the power that's in the viewless wind,
And then the air: then all begins to move,
The blood is stirred, and all the flesh responds,
It passes to the marrow and the bones,
Whether 'tis joy or something quite opposed.
No pain can thus invade, no bitter ill
Thus reach us, but the whole is so disturbed
No room is left for life, the soul itself
Flies through the body's pores, with all its parts,
Yet oft these stirrings are but surface deep,
And this is why we still retain our life.

Its elements.

Now I would gladly tell how these are mixed,
And how arranged for work, but am held back
By my native speech's poverty, but still
I'll do, as best I can. Among themselves
These primal atoms move in unison,
That none can separate, or leave the rest,
Though many, but they still remain as one.
So in the flesh of anything you like,
There's smell and heat and flavour, yet of these
There's but a single bulk of body formed.
Thus heat and air and the invisible wind
United make one nature, and that force
So nimble, which can move them like itself,
And is the cause of feeling to our frame.
This nature lurks within, is hidden away,
More than aught else, soul of our very soul,
Just as the force of mind and power of soul
Are latent in our body and our limbs,
Are formed of atoms few and small, so too
This nameless power, like-formed, is hidden away,
Soul of our very soul, o'er all supreme.
In like way wind and air and heat must grow

ON THE NATURE OF THINGS

iii., 283-312.

In union through our limbs: now one gives way
And now another leads, that so from all
A single whole be formed, lest heat and wind
And power of air acting apart destroy
All feeling, and disperse it far away
By their disunion. Yet still the mind
Has heat within it when it waxes wrath,
And passion glances from the flashing eyes.
There's the cold breath of air that waits on fear,
Which makes our members shudder, thrills us
through,

And there's the light and gentle air, which goes
With mind at ease and cheerful countenance.
But more of heat they have whose passionate
heart

And angry mind give way with ease to wrath.
First come the lions with terrific force,
Who with their roaring split their very heart,
Nor can contain their floods of rage within.
The chilly mind of stags has more of wind,
More quickly drives chill air throughout the limbs,
And makes their frame to tremble. While the ox
Lives rather on still air, nor does the flame,
The smoky flame of anger rouse it so,
Pouring dark shadows round, nor does it lie
Trembling, transfixed with the icy darts of fear:
It comes between the stags and savage lions:
So 'tis with men: howe'er refined some are
By training, still perforce it leaves behind
The original nature of the mind in each,
Nor must we think that evil can be torn
Up by the roots at once, but one remains
More prone to passion, and another feels
More easily fear, and yet a third displays

T. LUCRETIUS CARUS

iii., 313-316.

More meekness than is right. In other things
Tis clear men's natures differ and their ways,
Though I cannot explain the causes now
Which still are hidden, nor detail the names
Which indicate the shapes the atoms wear,
From which their variations spring at first.
This only I affirm, so small the trace
Of our first nature reason can't expel,
That nothing hinders why we should not lead
A life in all things worthy of the gods.

Soul and
body
together
constitute
life.

This nature of the soul the body holds,
It is the body's guard, the seat of life,
They hang together interlaced, nor can
Be torn asunder, or destruction comes.
Ev'n as 'tis hard from lumps of frankincense
To pluck the smell, yet not destroy the whole :
So from the body you cannot remove
The nature of the mind and soul, and leave
The rest uninjured. For from very birth
Their atoms are so closely intertwined,
So gifted with a common life, so plain
It is the power of body and of mind
Don't feel apart without each other's help,
But that sensation passes through our frame
Stirred up by motions on the part of each.
The body's not begotten by itself,
Alone it cannot grow, nor death escape.
For not as water that oft loses heat
Yet is not lost itself, but still remains,
Not thus our frame can bear the soul's release,
But when it goes, it perishes amain,
And rots away. And thus from early life
The body and the soul together learn
The vital motions, ev'n when hidden away

ON THE NATURE OF THINGS

iii.. 347-371.

Within the mother's womb, and there can be
No parting without mischief and decay,
And thus you see since that conjoined they live,
Conjoined as well their nature still must be.

The body
feels by
combination
with the
soul.

And further if there's any that denies
The body feels, and thinks the soul alone
Gives rise to motions that can make us feel,
Extending through the body, he is wrong.
The fact's against him. What can be alleged
To prove the body feels, but that the facts
Have long declared and teach us so? 'But when
The soul is gone, the body feels no more.'
Yes, for it loses what was not its own
In life, and much beside it loses when it dies.

The eyes.

Again, to say the eyes can nothing see,
That they are but the open doors, through which
The soul can look, is hard: we feel they're not:
And feeling says it is the pupils see,
And all the more because sometimes you know
We cannot see bright lights, because the glare
Prevents us: this would not be so with doors,
For though we see through them, they have
themselves

Nothing at all to do. If eyes were doors*
Then when the doors are gone, the door-posts too,
The mind should see more clearly than before.

Theory of
Democritus
false.

And here again be sure you don't accept
As true the dictum of Democritus,†

* Cf. Shakespeare, *Richard III.*, v. 3:

'To thee I do commend my watchful soul
Ere I let fall the windows of my eyes.'

† Democritus, a Greek philosopher, born at Abdera in 460 B.C.
One of the earliest exponents of the Atomic theory. In the point
here mentioned Epicurus somewhat differed, as he did on others.
Cf. v. 671.

T. LUCRETII CARUS

iii., 372-402.

That the first seeds of body and of mind
Are placed alternately, each still by each,
And weave our frame together. For the soul
Is formed of smaller elements than they,
Much fewer too, and scattered through our frame
In scanty numbers, so that this alone
You can lay down, that the first germs of soul
Have spaces in their midst as large as are
The bodies that arouse in us the sense
Of feeling by their motions. Thus at times
We do not feel the dust upon our limbs,
Nor chalk that's shaken o'er us, nor the mist
At night, nor yet the spider's slender threads,
When we are caught in them, nor yet his web
All twisted on our head, nor yet the wings
Of birds, and flying down of plants, which are
Almost too light to fall, nor yet the tread
Of every creeping thing, nor yet each step
Which feet of gnats imprint upon our skin.
So many then must be the seeds dispersed
Throughout our frame, e'en the soul's elements
Scattered abroad at such great intervals
Can feel, and come together, and first meet
And then again recoil each in its turn.

The mind
the essential
of life.

The mind has more to do with holding tight
The bands of life: it has more sovereign sway
Than has the soul o'er life. Without the mind,
Without intelligence the soul cannot
Remain a single moment in our frame,
It follows in its turn, departs in air,
And leaves the chilled limbs in the frost of death.*
But he, whose mind and understanding still
Remain intact, he still has life in him.

* Cf. Shirley: 'Death lays his icy hands on kings.'

ON THE NATURE OF THINGS

iii., 403-433.

What though the trunk be mangled, and its limbs
Torn off all round, the soul removed and dragged
Right from it, still it lives, and still inhales
Ætherial air of heaven: and thus deprived
Not altogether, but in larger part
Of soul, it lingers on and clings to life:
'Tis just as when the eye is wounded, if
The pupil is intact, you still can see,
Provided you don't injure the whole ball,
And cut around the pupil, leaving it
Alone: that cannot be without the loss
Of eyesight. If the centre of the eye
Be touched, however little, sight is gone
At once, and darkness follows, though the ball
Remains quite unimpaired. Such are the terms
On which the soul and mind in union are,
Ever united closely each to each.

The soul is
mortal.

And now that you may know that minds and
souls

Of creatures still are born, and have to die,
I will pursue my song, song worthy thee,
Fruit of long study and of pleasant toil.
For you it is to call them by one name,
And when I speak of soul, and call it mortal,
Believe I speak of mind as well, as how
They both are one, in union each with each.
First since I proved the soul was finely made
Of atoms quite minute and smaller far
Than water, mist, or smoke: excelling them
In nimbleness, and much more easily stirred:
As when it's moved by images of smoke
Or mist, or when in sleep we see on high
The altars steam forth heat, and lift their smoke:
For hence such images are oft produced—

Is mobile
and of
minute
atoms, so
can't be
held to-
gether when
leaves body

T. LUCRETIUS CARUS

iii., 434-454.

Since then the water, when the bowls are broken,
 You see flow forth, departing every way,
 And mist and smoke dissolve themselves in air,
 You must believe the soul too is dissolved,
 And much more quickly dies and passes off
 Into its primal atoms, when it once
 Has left the body: that, as you may say,
 Is the soul's bowl,* and when it cannot hold
 It longer, shattered by some fierce attack,
 Or by the lack of blood within the veins,
 How can it be together held by air,
 The air which is far lighter than our frame
 And more incompetent to hold it in?†

2, —
 The mind is
 born, grows,
 and ages
 with the
 body.

Besides we see the mind is surely born
 Together with the body: grows with it:
 And with it too grows old:‡ for even as
 Children with body frail and delicate
 Totter about, their mind as feeble too:
 Yet when they've reached maturity of years,
 Their judgment's stronger, and their mind more
 firm:

Then after, when the mighty force of years
 Their frame has shaken, and their limbs collapse
 With blunted strength, the intellect grows dim,
 The tongue talks nonsense and the mind gives way,
 And all things fail, and all together go. §

* Cf. Cicero. *Tusc.* i. 22, 52: 'Nosce animum tuum, nam corpus quidem est quasi vas, aut aliquod animi receptaculum.'

† Read 'incohibens sit.'

‡ Voltaire uses the same argument:

'Est-ce là cet esprit survivant à nous-même?
 Il naît avec nos sens, croît, s'affaiblit comme eux;
 Hélas! périrait-il de même?
 Je ne sais; mais j'ose espérer.'

§ Cf. Shakespeare, *As you like it*, ii. 7:

'Sans teeth, sans taste, sans eyes, sans everything.'

ON THE NATURE OF THINGS

iii., 455-485.

The nature of the soul goes too, like smoke,
Into the higher air—since both we see
Are born and grow together, as I've shown,
And both worn out with weight of years decline.

And so we see, as the body undergoes
Cruel disease and grief oft hard to bear,
The mind too has fierce cares, and grief, and
fear:

It must then share in death. And then again
The body sick, the mind oft goes astray:
It loses sense, and drivels in its speech,
And oft in heavy lethargy is borne
To deep eternal sleep with drooping eyes
And sinking head, reclined upon the breast:
No voice it hears, no face it knows of those
Who standing round would call it back to life,
Bedewing still their face and cheeks with tears.
You must admit the mind then is dissolved,
Since it thus shares contagion of disease:
Grief and disease alike can fashion death,
As many deaths have taught us well ere now.

Again how is it, when the strong fierce wine
Is in a man, and all its fiery heat
Is coursing through his veins, the body grows
Quite heavy, and his limbs are hampered sore
As he reels about, his stuttering tongue is dumb,
His mind is limp, his eyes they swim, while shouts
And quarrels and hiccups spread around, and all
That follows such a scene? How does it come
Unless wine's strength, with all its fiery force,
Is able to upset and disarrange
The soul within the body? But when thus
Things are confused and troubled, sure they show,
If but a stronger cause had stolen in

3. The mind
like the
body suffers
pain and
disease.

4. Intoxication
affects
mind as
well as
body

T. LUCRETIVS CARUS

iii., 486-513.

They would have perished, robbed of further years.
It often happens, that before our eyes
A man struck by disease, as by a bolt,
Falls down, all foaming at the mouth, he moans,
Shivers, extends his muscles, and is racked;
Breathes fitfully, would toss his wearied limbs;
Why is it? 'Tis the strength of the disease
Spread through his limbs disorders him, he foams
As though he would eject his soul, just as,
On the salt sea, waves swell before the storm.
Follows a groan, because his limbs are racked
With pain, and that the voice-producing seeds
Are driven forth, and through the mouth are borne
In one great mass, the road they know so well,
The path that's paved. Then madness follows on,
Because the powers of mind and soul are out
Of tune, and as I've shown, are scattered far
Distraught by the same dire disease. But when
The illness' cause has changed its course again,
And the black humour of the sickened frame
Has gone back to its hiding-place, once more
He rises with a tottering step, and then
By slow degrees recovers all his sense,
And so regains his soul. Since then these things
Are so disturbed by such disease, and toil
'Neath such a weight of misery and pain
Within the body, how can you believe
Without the body, in the open air;
Souls live still battling with the stormy winds?
And since we see the mind too can be healed
Just like the body, and its course quite changed
By fitting treatment, surely that must show
The mind is mortal. It is natural
That you must something add, or take away,

diseases of
body affect
mind

Epilepsy

Mind can
be cured
by medicine

ON THE NATURE OF THINGS

iii., 514-543.

Or change in order, if you wish to change
The mind, or any other nature seek
To bend. But what's immortal cannot be
Transposed, nought can be added, nought with-
drawn ;

For sure whatever doth its bounds o'erpass,
It is no longer what it was, 'tis dead.
And so the mind by being sick itself,
Or needing treatment, gives a certain sign
Of its mortality. And thus we see
To reasoning false, truth still presents itself,
Will not allow the assailant to escape,
But with a two-edged argument achieves
Its victory o'er the sophistry of men.

When the
body
mortifies
the soul
perishes.

Again, we see a man go by degrees,
And one by one his members losing sense :
His toes and then his nails grow livid, then
His feet and legs all die, and through his frame
Death's icy footsteps creep by slow degrees.
Since then the nature of the soul thus goes,
Is rent, nor has existence as a whole,
It must be mortal. But if you should think
It can itself make way throughout the frame,
And mass its parts together, and draw sense
From all the members, then the place in which
So great a store of soul is gathered up,
Should more of sense possess. Since 'tis not so,
As we have said before, 'tis scattered wide
And torn to pieces, and it therefore dies.
And even did I grant what's false, and say
The soul might possibly be gathered up
In the frame of those, who dying bit by bit
Thus leave the light, yet you must still admit
The soul is mortal, nor doth it matter much

T. LUCRETIUS CARUS

iii., 544-571.

Whether it perishes, diffused in air,
Or in a mass imbrates,* since anyhow
Still more and more all sense deserts the man,
And ever less and less of life remains.

And since the mind's one part of man, which still
Remains in one fixed place, as eyes or ears
Or other senses which direct our life,
And as the hand or eye or nose must cease
To feel or live, when parted from our frame,
But in a little time will rot away,
Just so the mind without the man must die:
The body seems to be a sort of vase
To hold it, or whatever else you can
Conceive more closely linked to it than that,
Since their connection is most closely tied.

The quickened power of body and of mind
Owe to their union all the strength and life
Which they enjoy: the mind alone without
The body can no vital force produce,
Nor can the body reft of soul endure
And feel: just as the eye, torn from its roots,
Without the body can no longer see,
So soul and mind alone can nothing do.
It is of course because their seeds are held
Mixed up with veins and flesh, sinews and bones
By the whole body, nor have any chance
By separating at great intervals
Of independent action: so shut in
They make the motions which can give us sense,
Which after death they cannot give, being forced

* Cf. Milton, *Comus*, 468:

‘The soul grows clotted by contagion,
Imbodies and imbrates, till she quite lose
The divine property of her first being.’

ON THE NATURE OF THINGS

iii., 572-599.

To leave the body, because then no more
They're held together. Surely air would be
Itself a living thing, if but the soul
Could there exist, and carry on the work
It did within the body. So again
And yet again, when once is broken up
The shelter of the body, and the air,
The vital air 's forced out, you must confess
The senses of the mind and soul as well
Must be dissolved, their cause of death the same.

1/
The gradual
decay of the
body pre-
cedes the
departure
of the soul.

And since the body can't survive the loss
Of soul, but rots away with noisome stench,
Why doubt the power of soul, risen from within
From utmost depths, has thence escaped like
smoke,

And that the body then has tumbled in,
With such a foul collapse, because its seat,
Its firm foundation has been quite upset,
The soul escaping out through all the frame
Through every winding path that it can find
And every opening that presents itself?
Thus you may know the soul has issued out,
Nay, was divided in the body first
Before, cast out of doors, it reached the air.
Even before the end of life is reached,
The soul when suffering from some sudden shock,
Would seem to wish to go and leave behind
The body, and the features seem as dead,
And the slack limbs shrink from the bloodless
trunk,

2
Shock—
disturbs
soul. No
dying man
feels soul
leave all
at once.

Ev'n so it is when as they say sometimes,
The mind is done, or else the soul has gone:
Where all is haste, and every one desires
To stop the snapping of the life's last chain.

T. LUCRETIUS CARUS

iii., 600-625.

Then shaken are the mind and the soul's power
And with the body to destruction glide,
A little heavier blow can break them up.
Why doubt then, that the feeble soul cast out
Without the body, all protection gone,
Not only can't endure eternally,
But cannot even for a moment live?
No one, when dying, seems to feel his soul
His body quit, first mounting to the throat
And gullet, but he rather feels it fail
In some one spot: as other senses fail
Each in its place. But if 'twere true, our mind
Immortal is, it would not grieve to die,
But rather that it had to leave its home,
And shed its sheltering garment like a snake.*

3. The mind
has its fixed
place.

Again the intellect, the judging mind,
Why is it not produced in head, or feet,
Or hands, not as it is in but one place,
Adhering to a certain fixed abode,
Why is it, save there is assigned to each
A place where to be born, and afterward
When born to live, that so the many parts
May be arranged in order fit and due?
Just as effect still follows cause, and flame
Is never found in rivers, cold in fire.

14 Soul if
immortal
must have
senses of
its own.

Besides if souls immortal were, and could
Without the body feel, it seems to me

* Cf. Virgil, *Æneid*, ii. 471:

'So shines renewed in youth the crested snake,
Who slept the winter in a thorny brake:
And casting off his slough when spring returns
Now looks aloft, and with new glory burns.'

DRYDEN.

Shakespeare, *Midsummer Night's Dream*, ii. 2:

'And there the snake throws her enamelled skin.'

ON THE NATURE OF THINGS

iii., 626-653.

Five senses they must have—no other way
Can we conceive how souls could flit about
In Acheron. Painters then and authors too
Of former days have pictured souls with sense;
Ah, yes, but neither eyes, nor nose, nor hand
The soul can have without the body, nor
A tongue, nor ears to hear; so by itself
It cannot either feel, or ev'n exist.

And since we feel that vital sense resides
In the whole body, all endowed with life,
If on a sudden comes a rapid blow,
Severing the parts, without a doubt the soul
Will parted be and severed, just as is
The body. But that which is treated so
Is not immortal. Stories still are told
How that scythe-bearing chariots often lop
Off limbs amid the carnage in such haste,
That they are seen to quiver on the ground,
While yet the man's mind and his faculty
Feel nothing, such the swiftness of the stroke:
And when the mind so bent is on the fight,
That with what's left the man goes in the fray,*
Nor sees the wheels, and greedy scythes have
hurled

His left hand and his shield amid the horse:
Nor does another know his right hand's gone,
While still he mounts and presses on his way.
Another tries to rise without a leg,
While dying feet still quiver with the toes

* Ennius, *Ann.*, 463, has a similar idea:

'Oscitat in campis caput a cervice repulsum
Semianimesque micant oculi, lucemque requirunt.'

Cf. too Virgil, *Aeneid*, x. 395:

'Semianimesque micant digiti, vivumque retractant.'

When the
body is
severed the
soul is
found in
the several
parts—it
cannot
then be
immortal.

T. LUCRETII CARUS

iii., 651-682.

Beside them on the ground. The head cut from
The warm and living trunk still keeps the face
It had in life, and the wide-open eyes
Until the soul is gone. Or yet again
Another case there is, if when you see
A serpent's tongue is darting out, its tail
Is quivering, and you choose to chop it up
With a knife in many parts, you soon will see
The parts you've cut writhing beneath the wound,
Scattering the earth with gore, the mouth in
front

Seeking the part behind, with burning bite
To allay the pain with which it has been struck,
Are we to say that there are souls in all
These parts? Why if you do, 'twill follow that
One animal had many souls in it.
It cannot be: so that, which once was one,
Has been divided, as the body was:
And therefore each alike must mortal be,
Since each in many parts has been divided.

b If the soul
is immortal
why do
we not
remember
an earlier
existence?

Besides, if the soul's immortal and is placed
In bodies when they're born, why cannot we
Remember days long past, nor still retain
The traces of past deeds? If the mind's powers
Have been so changed, that all remembrance of
The past is gone, that is the same as death:
Therefore you must admit that the old soul
Is dead, and that, now there, has now been made
anew.

1 If the soul
were placed
in the body
from with-
out the
union could
not be so
close as it is.

Besides if when our body's fully formed,
The quickened power of mind is placed therein,
When we first cross life's threshold and are
born,

It follows that it should not seem to be

ON THE NATURE OF THINGS

iii., 683-712.

One with the body, in the very blood,
But in a cage should live itself alone :
And yet provide the body with its sense.
But this undoubted facts do quite forbid.
For it is so mixed up with veins and flesh,
Sinews and bones, that ev'n the very teeth
Have feeling in them, as is shown full well
In the act of biting, in the sudden twinge
Cold water gives, the crunching of a stone
Out of the loaf, again and yet again
We must not fancy souls do not have birth,
Or are exempted from the law of death.
We cannot think they are so closely twined
Within our frames, if from without they came,
Nor since they are so close, does it appear,
That they could leave unharmed, and free them-
selves

From sinews, bones and joints, and all unscathed.

But if you think the soul comes from without,

And permeates our limbs, so much the more

With the body it will die: what permeates thus,

Must be dissolved, and therefore die. As food

Dispersed through all the body's passages,

When it is given to the limbs and joints

Quite disappears, and turns to something else,

So soul and mind, however whole they be

When first they enter, are at last dissolved,

While through the body's passages the limbs

Receive the parts of which the mind is formed

Which rules our body, born of that same soul

Which perished when dispersed throughout the
frame.

The soul then as it has its birthday thus,

Is not, as it would seem, without its grave.

T. LUCRETIUS CARUS

iii., 713-743.

Worms issue
from dead
bodies: have
they each a
soul im-
planted from
without?

can't come
from
outside, nor
make bodies
for selves, nor
enter bodies
already
formed.

Again you ask do its seeds remain behind
When the body's dead? If they are left to stay,
The soul is not immortal, since it goes
Without some parts of it: but if it's gone
From the yet untainted limbs, naught left behind,
Whence does the corpse's stinking flesh produce
Great worms, and whence so great a swarm
Of boneless, bloodless living things to infest
Our swelling limbs? But, if perchance you think
Souls enter worms, and each can find its way
Into a body, and take no account
How many thousand souls, instead of one
That's gone have come to light, we must inquire
And settle, whether souls hunt out the seeds
Of worms, and build their dwellings or are brought
To bodies formed already. None can say
Why they should make these bodies, or should
take

Such toil, since, being without them, nor disease,
Nor cold, nor hunger trouble them at all:
The body much more suffers from such ills:
The mind by contact with it suffers too.
And yet however useful it might be
For them to make a body, where to dwell,
'Tis plain, they cannot do it. So the soul
Nor limbs nor body makes: nor is it placed
In bodies when they're fully formed; it could
Not then be fitly joined with them at all
Nor have the fellow-feeling which it should.

The various
characteris-
tics of
animals
depend on
the soul
which is
born and
grows with
them.

Again, pray, why does savage fierceness still
Infest the lion's surly brood? Why has
The fox such cunning, and the deer such speed
To fly? It gets it from its father, his
The fear that spurs it on. Take others too,

ON THE NATURE OF THINGS

iii., 744-770.

Why are all qualities inborn in us—
Our limbs and temper—from our earliest days,
If not because a certain power of mind
Derived from seed and breed grows step by step
With the body's growth? If mind immortal were,
If it could change the bodies where it dwells,
Then animals would change their character:
The hound Hyrcania* bred would fly the stag,
The hawk in air would cower before the dove,
Men's minds would fail, and wild beasts minds
possess.

To say as some have done the soul can change
With change of place, become another soul,
Is false: for what is changed, is so dissolved,
It dies; the parts are shifted from their place,
And lose their order: they must be dispersed
Throughout the frame, in order that at last
They one and all may with the body die.
But if they say that still the souls of men
Must go to human bodies, then I ask
How is it that a soul that's wise, becomes
Foolish sometimes, how is it that a boy
Wants prudence, why a foal, though trained, is not
The equal of the horse in strength? Be sure
They'll try to escape by saying that the soul
In a weak body's weak. And if they do
They must admit the soul is mortal, since
By being so changed it loses life and sense.
How can it with the body grow in strength
And reach the much-desired flower of age,

* Hyrcania was a mountainous district on the southern shore of the Caspian Sea, inhabited by many wild beasts. Cf. Virgil, *Æneid*, iv. 367. Shakespeare, 3 *Henry VI.*, i. 4, writes:

'More inhuman, more inexorable,
O ten times more—than tigers of Hyrcania.'

T. LUCRETIUS CARUS

iii., 771-800.

Unless it be a partner from the first?
 Why does it leave the limbs decayed with age?
 Is it it fears within the putrid corpse
 To stay, or that its shelter worn with years
 May tumble down? * But there are no such risks
 To those who're dowered with immortality.

It is absurd
 to think of
 souls wait-
 ing for the
 choice of a
 body to
 dwell in.

Again to think, that souls stand by to wait
 On love matches, or on a wild beast's birth,
 Seems quite absurd; immortal if they are
 To wait for mortal bodies numberless,
 And fight among themselves which can be first
 And best: unless indeed a bargain's made
 Among the souls that that which comes the first
 Has the first place, with no appeal to strength,

No: soul and
 mind have
 their
 appointed
 place of
 existence.

Again, no tree can live in air, no cloud
 In the deep sea, no fishes in the fields,
 No blood in wood, no sap in any stone,
 Where each can grow and be, has been arranged.
 Thus mind without a body can't exist,
 Nor far from blood and sinews. Even if,
 Which were more likely, mind could be in head
 Or shoulders or the heels, or else be born
 In any other part you like to name,
 It still would stay in one and the same man,
 And in one vessel. Since it is arranged
 Where soul and mind can grow and be in us,
 So much the more must we deny that it
 Outside the body can be born at all:
 So when the body dies we must admit
 The soul dies too, dispersed throughout the frame
 Mortal to join with what immortal is.

* Mr. Duff quotes Waller:

'The soul's dark cottage battered and decayed
 Lets in new light through chinks that time has made.'

ON THE NATURE OF THINGS

iii., 800-838.

To think that they could ever feel the same,
Is foolish: what could be more different,
More inharmonious and more estranged,
Than mortal with immortal, thus to try
In constant union still to brave the storm,
The bitter storm of life? But if the soul
Is to be held immortal, as that it
Is sheltered from the things that make for death,
Either because what is injurious
To life keeps far away, or when it comes
Retires again before we suffer loss,
Experience shows that this cannot be true,
For sure besides that it is sick whene'er
The body is, there comes the pain it feels
Of things to come, which makes it sick with fear,
Wearied with care, besides the sad remorse
It often has for sins of former days:
Then there is madness which attacks the mind
Alone, the loss of memory, and again
It sometimes sinks in lethargy's dark streams.

So soul and
mind being
mortal death
is nought
to us.

So death is nought to us, no, not a jot,
Since mind is mortal; and just as it was,
In bygone days, we troubled not ourselves
And felt no ill when Carthaginians came*
To give us battle, and the universe
Shook with the fearful tumults of the war,
And quaked beneath high heaven, and mankind
Doubted which empire was to stand or fall
On land and sea, so when we are no more,

* The struggle between Rome and Carthage lasted from 263 B.C. to 201 B.C., when amid the triumphs of Scipio, Rome finally won the day and became the mistress of the world.

Spenser, *Faery Queen*, i. 12, 7, has 'That with their horror heaven and earth did ring.'

T. LUCRETIUS CARUS

iii., 839-863

When soul and body part, of which we're formed,
To us, who then shall be no more, remains
No knowledge and no feeling of it all,
Not if the earth shall mingle with the sea,
The sea to heaven ascend. And even if
The mind and soul feel aught when they're with-
drawn

From out our frames, it will be naught to us,
Who by a sort of marriage tie between
The soul and body make a single being.
And if years gather up our sad remains
After decease, and place them where they are,
Kindle for us again the light of life,
It would not matter, once remembrance snapped.
To any self we may have been before
We pay no heed, for it we have no care.
When you regard the course of time that's past,*
Immeasurable time, and then reflect
How varied are the motions it involves,
'Tis easy to believe that these same seeds
Which form us now, before have had their day.
Yet we cannot remember: for a break
In life is interposed, and all the things
That stir our feelings have been widely changed.
For he, who has before him ill and woe,
He must be there in person when it comes;

* So M. Arnold to his dog:

'Not the course
Of all the centuries yet to come,
And not the infinite resource
Of Nature with its countless sum
Of figures with her fulness vast
Of new creation evermore
Can ever quite repeat the past
Or just thy little day restore.'

ON THE NATURE OF THINGS

iii., 864-888.

Death hinders this: forbids that he shall be
The man to whom it happens: so be sure
Naught terrible there is in death, that he,
Who is not, misery cannot feel, nor does
It one whit matter whether he was born
At any other time, when once the death,
That never dies, has ta'en the life that dies.

Insincerity
of those
who believe
in the
immortality
of the soul.

So when you see a man disquiet himself,
That after death his body in the grave
Will rot away, or be by flames devoured,
Or by the wild beast's jaws, be sure that he
Does not ring sound, within his heart you'll find
There lurks some secret sting, tormenting still,
Although he says he will not feel when dead.
He does not act according to his words,
Nor ev'n accept the principle, on which
They hang; he does not rid himself of life,
But all unwitting thinks that something will
Survive of him. For whilst he is alive,
If he imagine that some future day
The birds and beasts his body will destroy,
He's much upset: and no distinction makes
Between that other and himself, nor leaves*
His body where it lies, thinks it is still
Himself, and standing by communicates
To it that which he feels. He is annoyed
That he was born a mortal, and sees not
That when death really comes there will be left
No other self, to live and mourn his loss,
And standing there to grieve that he lies torn
By beasts, or burnt in flames. For if it be
An evil after death to be torn up

* Montaigne quotes these lines, and a saying of Solon that no one is happy until he is no more, i. 3.

T. LUCRETIUS CARUS

iii., 889-905.

By jaws and teeth of beasts, I cannot find
It is not bitter too to be imposed
On scorching fires and kindle in the flames,
Be embalmed in honey, stifled in an urn,
Or yet again to freeze in icy cold
Stretched on the surface of a marble stone,
Or pressed and crushed by heavy earth above.

Why should
we lament
the dead:
they are
at rest.

‘No more thy home will welcome thee again,*
No more thy wife and loving children run
To snatch a kiss, and touch thy heart with joy
Too deep for words. No more mayst thou be
deemed

A prosperous man, a bulwark to thy house.
Thou luckless one, ah! one disastrous day,
Your neighbours say, ‘has taken all away,
All, all thou countedst dear, unhappy man.’
They do not add, ‘and now no longer is
There any longing for the things that were.’
If this they but could see in thought, and then
Express in words, they’d rid themselves at once
Of much distress and fear. ‘Thou even as
Thou art, sunk in the sleep of death, shalt be
For ever from all pains and torments free:†

* Cf. Gray, *Elegy* :

‘For them no more the blazing hearth shall burn,
Or busy housewife ply her evening care;
No children run to lisp their sire’s return,
Or climb his knees the envied kiss to share.’

† Cf. Shakespeare, *Hamlet*, iii. 1 :

‘No more! and by a sleep to say we end
The heartaches and the thousand natural shocks
That flesh is heir to: ’tis a consummation
Devoutly to be wished.’

Shakespeare, *Macbeth*, iii. 2, 23 :

‘Duncan’s in his grave;
After life’s fitful fever he sleeps well.’

ON THE NATURE OF THINGS

iii., 906-924.

We when we saw thee on the funeral pyre,
Dread pyre, wept for thee tears that would not
cease;

No day will ever come when grief for thee
Shall leave our heart.' This question should be
asked,

Of those that thus address such words as these,
'Pray what is there so bitter, when the end
Is a sound slumber and a long good-night,
That men should pine and waste themselves away
In never-ending sorrow for the dead?'

Instances of
men's folly.

So when men sit at table in their cups
And crown their brows with wreaths, they often
say,

'Brief life is here our portion:* soon it goes
And never will return.' As if in death
Their chiefest ill would be, that parching thirst
And drought would burn their miserable frames,
Or else some other craving them beset:
What folly, no one wants himself or life,
When mind and body both are lulled to sleep:
And given this sleep will last eternally,
No longing for ourselves will e'er be felt.
Yet at that time when we are thus in sleep,
Not far away, but close at hand throughout
Our frame, there wander motions giving sense,

And Spenser, *Faerie Queen*, i. 9, 40:

'He there does now enjoy eternal rest
And happy ease which thou dost want and crave.
Is not short pain well borne that brings long ease
And lays the soul to sleep in quiet grave?
Sleep after toil, port after stormy seas,
Ease after war, death after life does greatly please.'

* Lucretius would seem to be reproving here the more ignoble
professors of the Epicurean school. Cf. St. Paul, 1 Cor. xv. 32.

T. LUCRETIVS CARVS

iii., 925-950.

As is seen when one aroused from sleep collects
His thoughts together. Death must be much less
For us, if it be less than what we see
Is naught. For greater surely is the loss
And the disorder of our earthly frames
That follows death, and no one wakes again
Who once has felt its chilly hand on him.

Nature
rebukes
us for
lamenting
death.

Or if again nature could find a voice,
And then reproach us in such words as these:
'What hast thou, man, so much at heart, or why
Griev'st thou so greatly? Why bewail thy death?
The life that's passed has been a happy one,
Not all the blessings that thou hadst are lost
In a leaky vase, and gone without avail:
Why not a satiated guest* depart,
And gladly seize, thou fool, the rest that comes?
But if what you enjoyed has wasted been,
All thrown away, and life itself disgusts,
Why seek to add to it, to lose again
And perish all in vain? Why not prefer
To make an end of life and labour too?
For nought there is that further I can find,†
Or fashion to give joy: all's still the same.
Though years have not decayed thy body, nor
Languish thy limbs with time, all's still the same,
Ev'n though you should outlast all living things,
Much more if you should never die at all.'
What answer can we make save to admit

* Cf. Shakespeare, *Cymbeline*, i. 7:

'The cloyed will,
That satiate yet unsatisfied desire,
That tub both filled and running.'

† Cf. Ecclesiastes, i. 9: 'The thing that hath been, it is' that
which shall be: and that which is done is that which shall be done,
and there is no new thing under the sun.'

ON THE NATURE OF THINGS

iii., 951-954.

That nature's plea is just, and is the truth?
If one who's older and of greater years
Grieve over loss of life unreasonably,
Would she not raise her voice and blame him thus?*

* On the whole passage, *cf.* Shakespeare, *Measure for Measure*, iii. 1. The Duke, it has been pointed out, though playing the part of a friar, preparing a criminal for death, gives Claudio none of the ordinary Christian consolations, and says not a syllable of a future life. The tone is Lucretian, not that Shakespeare had read Lucretius, but his knowledge was derived from Florio's edition of Montaigne, published in 1603.

'*The Duke.* Be absolute for death: either death or life
Shall thereby be the sweeter. Reason thus with life,—
If I do lose thee, I do lose a thing
That none but fools would keep; a breath thou art,
Servile to all the skiey influences,
That dost this habitation, where thou keep'st,
Hourly afflict: merely thou art death's fool;
For him thou labour'st by thy flight to shun,
And yet run'st towards him still. Thou art not noble
For all the accommodations that thou bear'st
Are nursed by baseness: Thou art by no means valiant,
For thou dost fear the soft and tender fork
Of a poor worm: thy best of rest is sleep,
And that thou oft provok'st: yet grossly fear'st
Thy death which is no more. Thou art not thyself
For thou exist'st on many a thousand grains
That issue out of dust: happy thou art not,
For what thou hast not, still thou striv'st to get,
And what thou hast, forget'st: Thou art not certain,
For thy complexion shifts to strange effects,
After the moon: if thou art rich, thou art poor:
For like an ass, whose back with ingots bows
Thou bear'st thy heavy riches but a journey
And death unloads thee: thou hast nor youth nor age,
But as it were an after dinner's sleep,
Dreaming on both: what yet can be in this,
That bears the name of life? Yet in this life,
Lie hid more thousand deaths: yet death we fear,
That makes these odds all even.'

Cf. Swinburne:

'Sleep: and if life was bitter to thee, pardon:
If sweet, give thanks: thou hast no more to live:
And to give thanks is good, and to forgive.'

T. LUCRETII CARUS

iii., 955-980

'Take hence thy tears, thou rogue, no more complaints.

Thou'st had thy full of life and all its joys,
And now thou diest: but because you long
For that which is not here, despise what's yours,
Thy life has gone imperfect and unloved,
And unexpected death stands over thee,
Before you're ready to depart, filled full
With all good things. Now say good-bye to all
Unsuited to thy age: and gracefully
Now leave the stage, for so indeed you must.'
Rightly, I think, she pleads, and brings her charge,
And rightly rallies such a man as this,
For age must still give place to newer things,
And one replace another: none is hurled
Down to the darksome pit of Tartarus:
Matter is needed, that a future age
May grow and flourish: when they've done with
life

They'll follow thee: no less than you they've died
In days gone by, and so will do again.
So one upon another still will come,
Life's given in fee to none, to all to use.
Think how the long past age of hoary time
Before our birth is nothing to us now,
This in a mirror Nature shows to us
Of what will be hereafter when we're dead.
Does this seem terrible, is this so sad?
Is't not less troubled than our daily sleep?

And sure those torments, which old stories tell
Are found in Acheron deep, we have them here,
All are reflected in this life of ours.
Not more does miserable Tantalus *

The tortures
told in myths
of the lower
world are
only alle-
gories of our
life here.

* Cf. Homer, *Odyssey*, xi. 582.

ON THE NATURE OF THINGS

iii., 981-1004.

Dread the great rock impending in the air,
Which never falls: than does the fear of gods,
The idle fear, oppress the heart of men:
They fear what chance may bring to each and all.
Birds do not make their way to Tityus' frame
In Acheron, nor can they find within
His spacious breast, whereon to fill their maws
Throughout eternity. However huge*
His body is in bulk, ev'n if it takes
Nine acres to accommodate his limbs,
Or the whole earth, he cannot always bear
Pain everlasting, or himself supply
From his own body food. But Tityus, he
Remains to us, who grovels still in lust,†
Whom birds devour, and gnawing care infests,
Or other woes from other passions rise.
In life how often Sisyphus we see,
One who is bent on seeking from the throng
The rods and cruel axes, marks of power,
And, still refused, comes back a sadder man.
To seek for power, at best an idle thing,
In this case never given, and for it
Hard toil to undergo, this is indeed
To force up-hill the rolling stone, which still
Comes back from mountain top and seeks to gain
In headlong haste the level of the plain.
Then still to feed the thankless mind with good,
To feed it still, yet never satisfy,

* Cf. Milton, *Paradise Lost*:

'his other parts beside
Prone on the flood extended long and large
Lay floating many a rood.'

† Mr. Duff quotes Kingsley:

'For ever doomed Ixion-like to reel
On mine own passions' ever-burning wheel.'

T. LUCRETIUS CARUS

iii., 1005-1023.

As do the seasons of the year for us,
When they come round and bring with them their
fruits

And varied joys, though after all is done
We never have enough, this is the tale
Of the girls in budding youth who tried to pour
The water into vessels that were holed
And never could be filled. Sure Cerberus,
The Furies, darksome Tartarus, which still
From out his throat belches forth horrid flames,*
Ixion's wheel and all the rest are tales,
They nowhere are, nor possibly can be.

X But still there is in life a natural fear
Of punishment for evil deeds, the more
Pronounced, as are the deeds more marked them-
selves,

X A price for guilt to pay, a prison perhaps,†
A hurling down the rock, the scourge, the rack,
The dungeon and the pitch, the burning plate,
The torch: and even if you have not these,
The conscience-stricken mind in deep alarm
Supplies fresh goads, and terrifies itself,
Nor sees what is the limit of its ills,
And what the end of all its punishment,
And even fears they may be worse by death.
Y Thus here the life of fools becomes a hell.‡

* Cf. Milton, *Paradise Lost*, i. 181:

'The seat of desolation, void of light
Save what the glimmering of these lurid flames
Casts pale and dreadful.'

† The prison in the Mamertine, the dungeon was added by Servius Tullius, and known as Tullianum. It was here St. Paul was confined. The rock was the Tarpeian.

‡ Cf. Milton, *Paradise Lost*, i. 255:

'The mind is its own place, and in itself
Can make a heav'n of hell, a hell of heav'n.'

ON THE NATURE OF THINGS

iii., 1024-1047.

Remember
the better
men who
have died
before you.

Thus sometimes, to yourself you ought to say,
'Good Ancus * too has closed his eyes on life,'
Who was by far a better man than you
In many things, unreasonable man.
Then many other kings and potentates
Have died, who mighty empires ruled, Ev'n he †
Who erstwhile made his way upon the deep,
And opened out a pathway for his troops
And made them pass on foot the salt sea pools,
And trampled them beneath his horse's feet,
With blinded eyes, laid down his soul at last.
The Scipio's son, ‡ the thunderbolt of war,
The dread of Carthage, gave his bones to earth
As though he were a slave. Add too to these
The inventors of the sciences and arts,
The companions of the Heliconian maids,
Of whom great Homer, sitting all alone,
The peerless Homer, holds his sceptre high,
And yet he sleeps the sleep of all the rest.
Democritus, when ripe old age had warned,
The movement of his mind had slower grown,
Of his own will offered his head to death.
Ev'n Epicurus died: the light of life
Had run its course for him, who far surpassed
All men in intellect, outshone them all,
As in the heavens the sun outshines the stars.
Yet still you doubt, and still are loth to go?
Whose life 's a living death, while yet you live

* Ancus, the fourth king of Rome. Virgil, vi. 816:

'Quem juxta sequitur jactantior Ancus

Nunc quoque jam nimium gaudens popularibus auris.'

† Xerxes, who led his troops across the Hellespont.

‡ Scipio Africanus Major, 234-183 B.C., conqueror of Zama, or Scipio A. Minor, who took Carthage, 146 B.C. Virgil, *Æneid*, vi. 843, styles them 'duo fulmina belli.'

T. LUCRETII CARUS

iii., 1048-1068.

And see the light, who spend the greater part
Of life in sleep, still snoring while awake,
Still seeing visions, full of groundless fears,
Nor yet can find what is your malady,
When like a sot you're full of anxious care
And wander on still drifting in your course,
In ever blind uncertainty of mind.

If men only
knew the
cause of
their cares
they would
not lead
such restless
lives as
they do.

If men could only, when they plainly feel
There is a load upon their mind, which soon
Will weigh them down, if they could only know
From whence it comes, and whence so great a load
Is pressing on their heart, they would not spend
Their life as now they do, not knowing what
They want, and ever seeking change of scene,
As though they thus might lay their burden down.
He often issues from his lordly house,*
Who's tired of home, then suddenly returns,
Feeling he is no better off abroad.
He rushes in his chariot to his seat
In headlong haste, as hurrying to bring help
To a house on fire: then yawns, when he has reached
The threshold, or sinks down in heavy sleep,
Tries to forget, or ev'n goes back to town.
So each man from himself attempts to escape,

* Cf. M. Arnold, *Obermann*, once more:

'In his cool hall, with haggard eyes
The Roman noble lay:
He drove abroad in furious guise
Along the Appian way:
He made a feast, drank fierce and fast,
And crowned his hair with flowers—
No easier, nor no quicker passed
The impracticable hours.'

And Plautus, *Mercator*, iii. 4, 1:

'Sumne ego homo miser qui nusquam bene queo quiescere?
Si domi sum, foris est animus: sin foris sum, animus domi est.'

ON THE NATURE OF THINGS

iii., 1069-1094.

(Which yet he cannot do, it clings to him
Do what he will), and so he hates himself
Because tho' sick he cannot find what 's wrong :
Which if he saw aright, he'd leave all else
And study Nature's laws, since what's in doubt
Is not our state just for a single hour,
But for eternity, where we must pass
All that remains to us, when death has come.

The longing
for life is
useless :
death comes
to all.

Once more what cowardly lust of life so strong
Has forced us to such dangers and such doubts ?
There is an end to life quite fixed and sure :
Death cannot be escaped : meet it we must.
We ever are engaged in like pursuits,
Nor can by living strike out pleasures new :
But while that which we crave, we cannot get,
It ever seems our chiefest end : and then
When got, there's something else, and always we
Are gaping with the thirst of longer life,
Most doubtful what the future may produce,
What chance will bring us, or what end's at hand.
Nor yet by living on do we take off
A single hour from death, nor can we file
A particle from off the time which we
Must spend among the dead. So you may live
As many generations as you will :
Yet none the less eternal death will wait,
Nor will he be no more, less long a time,
Who from to-day has made an end of life
Than he who died some months or years before.

T. LUCRETII CARUS

BOOK IV.

iv., 1-22.

The aim of
Lucretius.

IN pathless ways the Muses love I stray,
Untrod by foot of man, and love to approach
The untasted springs and drink, and cull fresh
flowers

And gather for my brows a glorious crown
With which the Muses in the days gone by
Have never decked the brows of any man.
This first because my theme is great, and I
For object have to free men's minds from fear
Of the bonds religious scruples have imposed.
And next because I pen such lucid lines
On matters hard, and serious, and attempt
To deck my poems with the Muse's charm.
That too would seem to me a useful task.
For as physicians when they have to give
Some nauseous draught to children, smear the edge
Around the cup with the sweet yellow juice
Of honey, that their unsuspecting years
May thus be duped, as far as lips can be,
And so may swallow down the bitter draught
And though deceived, yet be not quite betrayed,
But by such means recruited strength regain.
So I now since this teaching seems to be
Bitter to those who have not handled it,
And the common herd start back on seeing it,
I have resolved to explain our plan to you
In sweet Pierian verse, and smear it o'er
With the sweet honey of the Muses' song,

ON THE NATURE OF THINGS

iv., 23-54.

If so by these means I might fix your mind
Upon my verse till you perceive the whole
Of Nature's plan, and understand its use.

The images
of things
which are
the cause of
visions.

Now since I've taught the nature of the mind,
Whence furnished with a body it grew strong,
And how 'twas rent and then returned again
To its primal atoms, now I will begin
To explain what closely to these things belongs,
That there are what we may proceed to call
The images of things, which are like films
Torn from the surface of the things, which fly
Hither and thither through the air, and when
They meet us in our waking hours, our minds
They fill with fright, and even in sleep, when oft
We see strange figures, and the images
Of those bereaved of light, which have alarmed
Us hushed in still repose*: lest we should think
That souls escape from Acheron, or ghosts
Among the living fly, or that of us
Some portion may be left behind, when mind
And body perish, and return again
To the first atoms out of which they came.

Their exist-
ence proved
by parallels
in the world
around.

This then I say that likenesses of things,
Thin shapes from the outside, are given off,
Which you may call a film or skin, because
Each image bears a shape and form like that
From which it has been shed and wandered forth.
That this is so, ev'n a dull mind may know.
And first because in things that we can see,
Many there are which send out from themselves

* Cf. Job, iv. 13: 'In thoughts from the visions of the night, when deep sleep falleth upon men, fear came upon me and trembling which caused all my bones to shake . . . an image was before mine eyes.'

T. LUCRETIVS CARUS

iv., 55-79.

Things loosely scattered and diffused in air,
As wood does smoke, or fires emit their heat :
Others of texture closer and more dense
Like the thin coats, which cicades doff off
In summer time, or the thin membranes which
Calves cast at birth, or else the coat of skin
Which the slippery serpent throws among the
thorns,

Where oft we find the brambles covered o'er
With fleeting spoils : and since these things occur,
Some image must be still thrown off from things
From off their surface. Why these films I've named
Should part from things, more than the others do,
Which in themselves are thin, and can't be seen,
No one can prove : the more so as there are
On the outside of things bodies minute
Which can be cast off, without change of place,
And keep their outline as it was before,
And far more quickly, since being few they are
Less hampered and are placed in the very front.
For certainly we see such things cast off
And freely scattered, as we just have shown,
Not only from within deep down, but from
The surface too, as colour oft is done.

This often happens in the theatres*
With awnings red and yellow and dark blue,
Which wave and flutter, as they stretch across
The masts and beams. For there you see them
tinge

The people sitting in the seats, and all
The glory of our stage, the senators

* The first stone theatre was erected by Pompey in Rome about the time of Lucretius' death : the older ones were temporary of wood with awnings stretched across the top.

Cf. Propertius, iv. 17, 13 : 'Pleno volitantia vela theatro.'

ON THE NATURE OF THINGS

iv., 80-109.

In robes of State, and make them dance about
In their own colours. And the more it seems
The theatre is compassed with walls,
The more do all things laugh and smile within,
With beauty flooded, while the light of day
Is close shut out. If sheets of canvas then
Can thus shed colour from their surface round,
Then other things, which likewise do discharge
From off their surface thus, may do the same.
So now we have the traces of these forms,
Which fly about of thinnest texture made,
So thin they cannot separately be seen.
Among them smell and smoke and heat as well
As other things, come forth diffused from things,
Quite thin, because in coming from below
They're torn within the winding passages,
Nor are there exits for them to escape
In solid mass. But, on the other hand,
When a thin film of colour from the top
Is sent off, there is nought to injure it,
Since it is ready to the hand, and lies
Upon the surface. Last of all, whate'er
Of images there may appear to us
In mirrors, water, or bright surfaces,
Be sure, since they are formed in similar ways,
And like the things themselves, that they are made
Of the thing's images. There are then forms
Minute and images of things themselves
Which individually none can see,
But which thrown back, and constantly reflected,
Give back a likeness that we all can see
From the mirror's surface: in no other way
Can they be kept so perfectly entire,
That figures like each thing are formed in turn.

T. LUCRETIUS CARUS

iv., 110-139.

These
images are
very fine
and small.

Now mark how thin and small this image is.
Think first how atoms are beyond the ken
Of sense, ev'n smaller than the things our eyes
At first cannot descry; for proof of this
Learn how minutely fine the bodies are
Of which things are composed. First living things
Are oft so small, that the third part of them
Cannot be seen at all. Of these how small
The inward parts must be, the heart, the eyes,
The limbs and joints? Yes, how minute they are?
What of the atoms of which soul and mind
Are formed? You see how small they needs
must be.

Again, of those which have a pungent smell,
All-heal and nauseous wormwood, southernwood
So strong in scent, and bitter centauries,
If any one of these you take between
Your fingers, they will smell for long enough:
So you may know that images of things
May oft be wandering up and down in shoals
Bereft of power, unable to be felt.

That there
are images
in the sky as
in the clouds.

But lest you should suppose that only shapes
Which come from things, and are their images,
Thus wander, there are others which are born
Spontaneously, and formed in lower air:
Fashioned in many ways, they're borne on high,
And, being fluid, often change their form
And turn in every way: Such are the clouds
Which oft we see to gather in the sky,
Blot the fair face of heaven, and as they go
Caress the air. Oft giants' faces seem *

* Cf. Wordsworth, 'Sky prospect from the plain of France,'
Knight's edition, vi. p. 283:

'Lo in the burning west the craggy nape
Of a proud Ararat! and thereupon

ON THE NATURE OF THINGS

iv., 139-154.

To hurry past, their shadows leave behind :
And mighty hills, and rocks torn from their sides,
Advance and pass across the sun : and then
Some monster seems to draw up other shapes
And drag a pack of storm clouds in its train.

They are
quickly
formed.

Now will I show how easily they're born,
For ever falling off and leaving things.
The outer surface still is being discharged
And flows off things, and when it others meets,
As glass, it passes through : but when it comes
Upon rough stones or wood, it is so torn,
No image it can give : but when the things
It meets are bright and dense, as mirrors are,
This does not happen : for it cannot pass,
As it does through glass, nor yet be torn asunder :
The smoothness of it makes that this is so :
And so the images return to us.

The Ark, her melancholy voyage done !
Yon rampant cloud mimics a lion's shape :
There combats a huge crocodile—agape
A golden spear to swallow.'

Cf. Shakespeare, Antony, iv. 12.

'Sometimes we see a cloud that's dragonish,
A vapour sometimes like a bear or lion,
A towered citadel, a pendant rock,
A forked mountain, or blue promontory
With trees upon 't, that nod unto the world
And mock our eyes with air.'

Hamlet, iii. 2 :

Hamlet. Do you see yonder cloud, that's almost in shape of
a camel ?

Polonius. By the mass, and 'tis like a camel indeed

H. Methinks 'tis like a weasel.

Pol. It is backed like a weasel.

H. Or like a whale ?

Pol. Very like a whale.

And Aristophanes, *Clouds*, 346 : 'Didst thou e'er see a cloud
like a centaur, or a panther, a wolf, or a bull ?'

T. LUCRETIUS CARUS

iv., 155-185.

However suddenly, whatever thing
You place before a mirror, there you have
At once an image. So you recognise
That from their surface in perpetual streams
Flow textures fine, and thinnest shapes of things.
Thus many images are soon begot:
Their birth is rapid. And as quickly too,
As the sun must send his rays to fill the world,
With light incessant streaming from himself,
So likewise in as little time must pass
Such images from things, and then be borne
In many ways in all directions round:
Since to whatever part of them we hold
A mirror, then it answers back at once
With things the same in colour and in form.

Besides ev'n when the face of heaven has been
Quite pure and bright, it suddenly becomes
O'ercast with hideous clouds, as you might think
Darkness had left its seat in hell, and filled
The vaults of heaven, in such numbers hang
Above us faces full of horror dread
'Mid the black night of storm clouds that collect.
Yet none can tell how small a part of these
An image is, or make it clear in words.

Swiftness of
motion of
these
images.

And now, how swiftly images are borne,
What speed they have in passing through the air,
How quick their longest voyage is, where'er
They take their varied way, this I will tell
In verses that are few but sweet to hear,
As is the short song of the swan preferred
To the loud cry of cranes all scattered wide
Amid the southern clouds. And first of all
We often see that things minute and small
Are swift. Such are the sun's light and its heat,

ON THE NATURE OF THINGS

iv., 186-216.

Formed of small bodies which are easily driven
And pass through air, impelled by force behind.
Light still succeeds to light, and as one team
Another team outdoes, so brightness still
Outdazzles brightness, wherefore images
Of these things must with equal swiftness pass
Through distance inexpressible by us
In numbers we can name, firstly because
There's something still behind them, which can
drive

Them forward and on, and next because they are
So thin in texture that they easily pass
The space of air between, and stream through it.
Again, if these small bodies, which are driven
Abroad from deep within, as the sun's light
And heat, are seen quite suddenly to spread
Themselves through air, and fly above the sea
And land, and flood the heaven, what of those
Already standing ready, when discharged,
With naught to stay their course, when they are
borne

With such a winged rapidity? 'Tis clear
That they must further and more quickly go,
And many times the distance pass, as swift
As the sun's rays can travel through the sky.
This seems a proof of the rapidity
With which these images are borne along,
That soon as ever there's a bright expanse
Of water spread beneath the sky, at once
When heaven is starlit, then the radiant stars
Imaged in water, correspond to those
Which are above. Thus see you not how soon
The image drops from heaven down to earth?
Again, and yet again, you must confess

T. LUCRETIUS CARUS

iv., 217-249.

That bodies which can strike our eye and wake
Our sense of vision travel wondrous fast.
Scents, too, for ever stream from certain things:
Just as cold does from rivers, heat from sun,
Spray from the ocean eating up the walls
Around our coasts. And various voices fly
Throughout the air. A saltish flavour comes
Oft in our mouth, whene'er we walk beside
The sea, and when we watch the wormwood mixed
A sense of bitterness. In such a constant stream
From all these things are borne their qualities,
And everywhere transmitted, no delay,
No respite given, since we even feel,
See and smell all things, aye, and hear their sound.

Touch and
sight are
due to the
same cause.

Again, some figure handled in the dark
Is known to be the same as that we saw
In the clear light of day: it needs must be
That touch and vision from one cause proceed.
We handle something square when it is dark,
And in the light what square can strike our sense,
But the image of it? So we see, in truth
The source of seeing is in images,
Nor without them can anything be viewed.
These films I speak of then are borne about,
Discharged, distributed on every side:
But since our eyes alone can see, they come
Whichever way we turn, there all the things
Still meet and strike our sight with form and hue
[And 'tis this image which enables us
To see and recognise how far each thing
May be from us: for when it's once discharged
It pushes forward, and stirs the air which lies
Between our eyes and it, and thus the air
Streams through our eyes, the pupils brushes past,

ON THE NATURE OF THINGS

iv., 250-281.

And passes on. And thus it is we see
How far a thing 's away. The more of air
That's stirred, the more of it that strikes our eyes,
So far more distant is the thing we see.
And these effects take place with such a speed,
That at once we see, and see how far it is.
Nor must you think it strange we do not see
The images, and yet can see the things.
For when the wind keeps ever beating on us,
When piercing cold is round, we do not feel
The separate particles of wind and cold,
But just the whole result: and so with blows
We feel them on our body, just as if
A something struck outside, and made us feel
That it was there, or when we strike a rock,
We only touch the surface as it were,
The outside colour, which we do not feel,
But feel the hardness of the rock within.

The mirror
and its
properties.

Now learn why the image can be seen beyond
The mirror, though it seems withdrawn within.
'Tis just the same as those things which are
viewed,

When a door allows an open prospect through,
And many things are seen which are outside:
This vision then is due to twofold airs:
First there it one inside the door, and then
The folding doors themselves to right and left,
Then the outside light which brushes past our eyes,
And then a second air, and then the things them-
selves

Which actually are seen beyond the doors.
So when the mirror's image first is loosed,
As it comes to our eyes, it pushes forward
The air that lies between our eyes and it,

T. LUCRETIUS CARUS

iv., 282-311.

And makes us see the air before we see
The mirror. But when that we see as well,
At once the image is conveyed from us
On to the mirror, and reflected comes
Back to our eyes, then drives another air,
And this we see before itself, and so
It from the mirror seems so far removed.
And so again, I say, it is not strange
That mirrors give reflexions, as they do,
Since in each case there is a double air.
Now to proceed, the right side of our frame
In mirrors still is on the left, because
Whene'er the image comes and strikes upon
The surface of the mirror, it returns
In altered shape, is driven straight back again,
Just as if one should take a plaster mask
And dash it on a pillar or a beam
And it were to preserve its shape in front,
And its own features mould again, and send
Them back to us. The effect will be, that what
Was once the right eye now will be the left,
And what was left will be the right in turn.
An image from one mirror too may pass
To another, so that even five or six
Replicas may be formed. And so the things
Which lurk within the interior of a house,
However far they be removed within,
May yet through tortuous passages be brought
To light of day, and seen to be within
The house by many mirrors. With such ease
From mirror on to mirror does it pass:
And as before the left becomes the right,
And then 'tis changed, and turns to what it was.
Moreover, mirrors that have sides like ours

reflexion

ON THE NATURE OF THINGS

iv., 312-340.

With curves, these send back images to us
With their right side the same as ours, because
They pass from one to other mirror, then
Thus twice repeated come to us, or else
It is because the image having reached
The mirror is turned round, the mirror's curve
Induces it to turn as we are turned.
Again you might suppose these images
Can march, put down their foot and mimic us
Exactly as we are, because whene'er
You from a mirror move aside, from there
No images can come, for nature says
That things when they are carried back must still
Come back at angles which must be the same
As those at which they first of all impinged.

Vision
and its
properties.

Bright things the eyes avoid and shun to see:
The sun can blind, if but you turn them to it,
Because its power is great, and images
Pass through clear air with mighty force below,
And strike the eyes and disarrange their form.
Moreover any vivid light can burn
The eyes, containing as it does the seeds
Of fire, which entering hurts them. So whate'er
The jaundiced look at, straight assumes the hue
Of greenish-yellow, in that many seeds
Of that same hue stream from them, and so meet
The images of things, and many too
Are mixed up in their eyes, and so infect
The other things, and paint them all alike
A yellow hue. So looking from the dark
We see what's in the light, because when first
The dark black air of night has seized our eyes
There follows bright white air, which cleanse
them,

T. LUCRETIUS CARUS

iv., 341-371.

And puts to flight the other's darker shades :
It is by far more nimble, as it's more
Minute, and has more power. As soon as it
Has filled the eyes with light, and opened out
The entry to them, all before blocked up,
At once the images which live in light
Do follow on, and make us that we see.
Out of the light we cannot do the same,
Because the thicker air of darkness comes,
Fills all the doors, and chokes the entrance to
The eyes, nor lets the images appear
To rouse their sight. Sometimes when we descry
Square towers of cities from afar, we think
They're round, because the angle seems
To look obtuse, or rather is not seen :
Its blow is lost, it reaches not our eyes,
Because while images are borne along
A long way through the air, it blunts their stroke
By oft collisions. So when in this way
The angle has thus quite escaped our sense,
The towers of stone seem to our eyes to be
As rubbed and rounded on a turning wheel.
Yet not like objects that are near and round,
But somewhat blurred, in a shadowy sort of way.
Our shadow too it seems moves with the sun,
Follows our steps, and imitates our gait :
At least if you believe that air deprived
Of light can step, and imitate our ways
And motions : for that which we're wont to call
A shadow, can indeed be nothing else
But air deprived of light. It really comes
Because in certain spots in order due
The earth is of the sun's light quite deprived,
Where'er we move and intercept it, while

ON THE NATURE OF THINGS

iv., 372-399.

The part we leave is filled again with light:
And so it seems, that what our shadow was
From the same quarter follows us along.
New rays of light are ever pouring forth,
The old still disappear, as wool in fire.
And so the earth is now deprived of light,
Now filled again, black shadows cleared away.

It is not the
eyes that
err, but the
mind comes
to a wrong
conclusion.

And yet we don't admit the eyes in this
Are cheated. Their's it is to ever watch
Where light and shadow are: and if the lights
Are still the same, and if the shadow here
Is passing there, or if it rather be
Ev'n as we said before, the mind itself
Must still determine: 'tis not for the eyes
The nature of these things to understand.
Don't blame the eyes: the ship in which we sail
Seems to stand still though moving: that which
lies

Fast at its mooring, seems to pass us by.
The hills and plains, past which we drive our ship
And sail with canvas set, still seem to drop
Astern of us. The stars all seem to stand
Fixt in ætherial vaults, and yet we know
They move for ever, since they rise and set,
Revisiting the places where they rose,
With their bright bodies having measured out
The sky. So sun and moon appear to stand
Fixed in one place, although we know they move.
When mountains rise from out the middle gurge*
Through which great fleets quite easily can pass,
They seem one island, so when children cease

* Cf. Milton, *Paradise Lost*, xii. 41:

'A black bituminous gurge
Boils out from underground.'

T. LUCRETIUS CARUS

iv., 400-418.

Turning themselves around, the hall itself
Appears to turn, the pillars to whirl round,
So that they scarcely can believe, but that
The roof is threatening on their heads to fall.
Again, when nature raises first on high*
The sun's red beams with trembling shoots of
flame,
And lifts them o'er the hills, those hills o'er which
He seems to stand, and blazing with his light
Floods them with fire, they scarce are further off
Two thousand arrows' flights, or nearer still
A dart's five hundred casts: and yet we know
Between them and the sun lie mighty tracts
Of ocean waves, spread out beneath the sky,
And many thousand lands are interspersed,
Of divers peoples and of varied beasts.
A pool of water, not a finger deep,
Standing upon the street between the stones
Affords a view beneath the earth as deep†
As is the lofty vault of heaven above
With its wide expanse: so that you seem to see
In it the clouds and sky, in wondrous way

* Cf. Shakespeare, *Venus and Adonis*, 858:

'The sun ariseth in his majesty:
Who doth the world so gloriously behold
That cedar tops and hills seem burnished gold.'

† Shelley has a beautiful poem, 'On Recollections,' embodying this idea:

'We paused beneath the pools that lie
Under the forest bough,
Each seemed as 'twere a little sky,
Gulfed in a world below.

There lay the glade and neighbouring lawn,
And through the dark green wood
The white sun twinkling like the dawn
Out of a speckled cloud.'

ON THE NATURE OF THINGS

iv., 419-447.

Hidden beneath the earth, though in the sky.
Again when our good horse in middle stream
Has stuck, and we look down upon the waves
Whirling along, their force oft seems to be
Bearing the standing horse athwart the stream,
Forcing it upwards, and where'er we look
All things seem to be carried on and flow
Just as we are ourselves. Again you know
Although a portico runs on quite straight,
Standing with equal pillars to the end,
Yet when it's seen from the top in all its length,
'Tis like a narrowing cone, joins roof with floor,
And right with left, until it seems to be
The cone's point vanishes and fades from sight.
To sailors on the sea the sun still seems
To rise from out the waves, and in the waves
To sink and hide his light: and just because
They nothing see but sea and sky: but you
Must not believe our senses still are wrong.
To those who do not know the sea, the ships
In harbour seem quite crippled, and to have
Their stern all broken, pressing up against
The water round. For where the oars are raised
Above the salt wave, they are straight, and so
The rudder too is straight, but where they're sunk
Beneath the water, they appear to be
Bent back and broken, sloping up and turned
Towards the surface, so they almost seem
To float upon it. So it is when winds
Carry light clouds across the sky at night,
The glittering constellations seem to glide
Athwart the rack, and travel on above
In quite a different way to which they go.
Or if our hand be placed beneath one eye

now a
palladium in
history
Bldg.

T. LUCRETIUS CARUS

iv., 448-476.

And press below, a certain feeling comes,
That doubles all we see: the light of lamps
Glowing with all their brilliant-coloured flames
Is double, and the furniture the same
Throughout the house, men's bodies and their faces
Are double too. Again, when sleep has bound
Ourselves in sweet repose, and all our frame
Is wrapped in quiet rest, we often seem
To be awake, and even move our limbs,
And in the night's black darkness see the sun
And light of day, and though so close confined
Change sky and sea and stream and mountain too,
And cross wide plains on foot, and hear strange
sounds

While all around the night is sternly still,
And we seem to speak, though silent. Much beside
That's strange we see, that tends to shake our
trust

In what we feel by sense: 'tis quite in vain:
The greatest part occurs because our mind
Adds suppositions of its own, and takes
Things to be seen, which senses never saw.
Naught harder is than to distinction make
Between what's manifest, and that which is
In doubt, conjectured by the mind itself.

If a man
says nothing
can be
known, how
does he
know it?
The senses
are our
true guide.

Then if a man believe that naught is known,
He surely cannot tell, if it be so
Or not, since he knows nothing. I will not
Argue with one, whose head is where his feet
Of right should be. Yet granting this
I'll ask this question still, since naught he has seen
That's true in things, however does he know
What knowledge is, what ignorance, or what
The difference is between what's true and false,

ON THE NATURE OF THINGS

iv.. 477-500.

What makes the doubtful differ from the sure?
'Tis from the sense you'll find that knowledge
comes,*

The sense can't be refuted. Something must
Be found which is more worthy of our trust,
Which can itself refute the false by true.
What's worthier of trust than sense itself?
Can reason, founded on mistaken sense, avail
To contradict, when it itself relies
Upon the senses? If they are not true
All reason's false. The ears, are they to blame
The eyes, or touch the ears? or shall the taste
Join issue with the touch, the smell refute,
The eyes disprove? Not so I think: the power
Of each is limited, each has its sphere,
And so we must perceive what's soft or cold
Or hot quite independently, and then
The different colours too, and all that hangs
On colour. Taste again has separate powers,
Smells come from one cause, from another sounds.
It follows that one sense cannot confute
Another: no, nor can they blame themselves,
Since each enjoys an equal confidence.
Whatever has seemed true to them, is true.
If reason can't explain, why what was square

* Locke, in his *Essay on the Human Understanding*, iv. 11, 3, uses similar language: 'I think nobody can in earnest be so sceptical as to be uncertain of the existence of those things which he sees and feels. At least, he that can doubt so far will never have any controversy with me: since he can never be sure I say anything contrary to his opinion.' Epicurus held that 'the senses are the criterion of truth: and that it is not possible to confute them.' Aristotle lays down that sense is the knowledge of particulars, memory is the retention of a sensation, experience is the sum of many memories, on which intelligence builds as its foundation. 'Practical wisdom,' said Casaubon, 'is only the remembering of many things.'

T. LUCRETIUS CARUS

iv., 501-529.

When close at hand, seemed at a distance round,
 'Tis better, if you do not know the cause,
 To blunder in your statement of that cause,
 Than lose your grasp of what is manifest,
 Destroy your earlier faith, and tear up all
 The grounds upon which life and safety rest.
 For not alone would reason fail, but life
 Itself would perish, if you trust not sense,*
 Flee from the precipice, and suchlike things,
 Pursue some other and some safer course.
 Thus all that empty wealth of words that's used
 Against the senses is quite out of place,
 As in a building if the first line's wrong,
 The square untrue, diverging from straight lines,
 Or if the level's false in any part,
 The whole must be in fault and sloping down,
 Crook'd, bulging, leaning this way, leaning that,
 Quite out of harmony, and fit to fall,
 Or even falling, ruined from the first
 By these mistakes. So reason too must be
False guide when founded on mistaken sense.

The other
senses.

Now to explain how each sense has assigned
 Its province to it, is my easy task.

Hearing.

First then all sound and voice is heard within
 The ears, when with their body they have struck
 The sense of hearing. For you must admit
 They have a body, since they strike our sense.
 Voice too oft scrapes the throat, and shouting loud
 Makes rough the windpipe: when the primal
 germs
 Of voice have gathered strong and made their
 way

* Cf. Cicero, *Arat.*, ii. 25: 'Quid ergo est quod percipi possit, si ne sensus quidem vera nuntiat?'

ON THE NATURE OF THINGS

iv., 530-560.

Through the narrow passage, then you see the
door

Of the mouth is scraped, through having been too
full.

Tis clear then words and voices have a body,
A body which can hurt; nor can you fail
To know how much the body loses, or
How much the strength and sinew is reduced
By speech enduring from the morn's bright dawn
To black night's shade, and all the more, if it
Is spoken with a shout. Sure voice must then
A body have, since matter it destroys.

Roughness is due to roughness in the parts
That form the voice, as smoothness is of smooth.
Nor are these bodies like which pierce the ears;
When the loud trumpet with its deepening tones
Brays o'er the plain, and some far barbarous land
Fling's back its raucous boom, and when the swans
From the swift torrents found on Helicon
In liquid notes upraise their mournful song.

When then we force these voices from within
And send them from our mouth, the nimble
tongue,

Deft fashioner of words, articulates,
Using the lips as instruments to form them.
And when it is not far from where it starts
To where the voice can reach, the very words
Must plainly syllable by syllable
Be heard: each voice is able to retain
Its shape and structure. But if there shall be
A longer distance intervenes than suits,
In passing through the air the voice becomes
Disturbed, the words confused: you only hear
A sound, yet cannot recognise what is

Words near
at hand
heard distinctly—at
a distance
they are
blurred.

T. LUCRETIUS CARUS

iv., 561-585.

The meaning of the words: so quite confused
And hindered is the voice that comes to you.
A single word oft reaches to the ears
Of a crowd, from the crier's mouth. One voice it
seems

Flies into many words at once, which reach
The several ears, each word distinct and clear.
Such voices, as don't fall upon the ears,
Are carried past and lost in idle air.
But some that strike upon some solid thing
Are thence thrown back, and in the sound they
give,

They mock you with an echo of the word.
When this you grasp, you can explain with ease
To others and yourself, how oft the rocks
In lonely spots give back the words again,
When straying friends we seek on darksome hills,
And summon with a shout. Myself have seen
Spots that returned even voices six or seven,
Though once you spoke—thus hills on hills
Reverberate the words which lend themselves
To the oft repetitions that they make.
Such spots the neighbours say are haunted* by
Goat-footed satyrs and by nymphs, and tell
Of fauns whose nightly revels and glad sports
Break, they allege, the silence of the hills,
Music awake, and the sweet melodies
The pipe pours forth responsive to the skill

* Cf. Milton, *Paradise Regained*, ii. 296:

‘to a superstitious eye the haunt
Of wood-gods and wood-nymphs.’

Paradise Lost, i. 782:

‘Whose midnight revels by a forest side
Or fountain some belated peasant sees
Or dreams he sees.’

ON THE NATURE OF THINGS

iv., 586-610.

Of players' fingers: and the country folk
Hear far and wide, they say, when Pan, half-beast,
Shaking the piny covering of his head,*
With curved lips runs o'er the gaping reeds,
Lest e'er the pipe should cease its woodland song.
Other strange tales and prodigies they tell,
Lest they be thought to dwell in spots forlorn,
Alone, forsaken by the Gods, and so
They tell such marvels, or perchance it is
Some other reason, since the human race
Loves ever to find food for listening ears.

We hear
where we
cannot see:
and why.

As for the rest, one need not wonder why
In places where the eye cannot see clear,
These voices come and strike upon the ear.
You often see a talking carried on
Through closed doors, because the voice can pass
In safety through the winding openings
Of things, which images cannot, for they
Unless the openings are straight through which
They make their way, like those we know of glass
Which every form can pass, are soon destroyed.
Again, a voice divides itself all round,
One from another springs, when once a voice
Is raised and sundered into many more,
As a spark of fire scatters its sparks abroad.
Places are filled with voices; though withdrawn
From view, they stir themselves and all around
The air is full of sound. But images
Of things when once sent forth, these still proceed
Upon straight lines, hence no one ever can

* Cf. Wordsworth on the power of sound:

‘The pipe of Pan to shepherds
Couched in the shadow of Arcadian pines,
Was passing sweet.’

T. LUCRETIUS CARUS

iv., 611-638.

See aught behind a wall, yet he can hear.
And yet ev'n voice itself when passing through
The walls of houses loses force, and gains
An entrance to the ear, confused and dull,
A sound it is, not words, we seem to hear.

Taste. Nor have the tongue and palate which are used
For tasting flavour, more that needs to be
Explained or dwelt on: flavours first we feel,
When eating with the mouth we press our food,
As if one took a sponge of water full
And squeezed it dry. And what we so press out
Is all spread out right through the palate's pores
And the close openings of the fine-made tongue.
And if these bodies which we so press out
Are smooth, they touch and stroke quite pleasantly
The moister parts that ooze around the tongue.
But on the other hand they wound our sense
And tear it as they go, and all the more
The rougher that they are. The pleasant taste
The flavour gives ends on the palate: then
When through the gullet it has passed away,
There is no pleasure while it is conveyed
Throughout our frame. Nor matters what the
food

On which the body's nourish'd, so you can
Digest what passes in within the frame,
And keep the stomach's juices unimpaired.

Different
foods for
different
animals,
and why.

Now I'll explain what food is nourishing
And sweet for different animals, and why
What some find bitter to the taste and sour,
To others is quite sweet: how why so great
The difference and discrepancy of things,
That one man's food, another's poison is.
A serpent there may be which if 'tis touched

ON THE NATURE OF THINGS

iv., 639-668.

By man's saliva, wastes and kills itself
By gnawing at its body. Hellebore
To us is poison, but to goats and quails
Is fattening. That you may know the fact
Remember what we said before, that seeds
Of things are mixed in many different ways.
Again all living creatures taking food,
Just as they're different in exterior
And each a different contour has of limbs,
Consist of seeds of varying figure too.
And as the seeds thus differ, there must be
A difference in the intervals and ways
Which we term openings in the limbs and mouth
And palate too. Some you will find are small,
Some large, some will three-cornered be, some
square,

Many are round, and many various shapes
With every kind of angle. As the shapes
Of seeds and as their motions may require,
There must be various openings, varying too,
According to the texture of the seed.
And so when what is sweet to this, to that
Is bitter, surely that which is thus sweet
Must of the smoothest seeds be formed, which
can

Enter the palate's pores with gentlest touch:
While he to whom the thing is bitter, must
Find rough-hooked particles within his throat;
All cases too from this you'll understand,
When fever comes from overmastering bile
Or any other cause creates disease,
The body suffers as a whole, and all
The particles within are rearranged:
The things that suited to our taste before

T. LUCRETIVS CARVS

iv., 689-696.

No longer suit: and others are more fit
Which give a bitter taste within: and each
Of these may be with honey mixed, as I
In previous verses have already shown.

Smell. Now as to how the influence of smell
Affects the nostrils. There are many things
From which can flow the varied stream of scents:
We must regard it ever flowing forth,
Sent out and scattered everywhere: but one
Is more adapted to one animal,
Another to another from their form.
So through the breeze, however far it be,
The scent of honey will attract the bees,
And so will corpses vultures. So the dog
With special power endowed leads on, where'er
The cloven hoof of beasts has placed its mark,
While from afar the smell of man can reach
The silver goose that saved Rome's* Capitol.
Thus scent assigned to each in ordered form
Brings food to one, and makes another shrink
From poison foul, and thus the race is saved.

Smell does
not travel
as far as
sound.

The scent whate'er it be which strikes the nose,
In one case reaches further than another,
But none so far as sound or voice, still less
The things that strike the eye and make us see.
It comes to us with slow uncertain step,
Oft dies before it reaches us, dispersed
In air full ready to receive: and this
Because it comes from deep within, and finds
Escape full hard: for sure the fact that things
Smell stronger when they're crushed, and beaten up,

* When the Gauls in 389 B.C. were on the point of taking the Capitol of Rome, its defenders were roused by the cackling of the sacred geese. Cf. Livy, v. 47; Virgil, *Æneid*, viii. 655.

ON THE NATURE OF THINGS

iv., 697-725.

And burned in fire, must show their scents arise
From deep within: and next because the smell
Is formed of larger particles than voice;
Stone walls it cannot pass, as voice and sound.
And for this reason too you cannot see
So easily, where the thing that smells may be:
The blow it strikes cools down in passing through
The air: the particles which tell before
What things are there, grow cold ere they can
reach

Our sense: hence dogs do often lose the scent,
And wander wide when in pursuit of game.

Nor is't alone in smells and flavours thus,
But also in the colours and the forms
Of things, that what may suited be to one
Another will not suit, that one may be
Perhaps more painful to the sight of one
Than to another. Ravening lions cannot
Stand by and see the cock with flapping wings
Put night to flight, and summon forth the dawn
With his shrill voice: they take to instant flight,
Because in the cock's body there are found
Some particles, which reach the lion's eyes,
And burying in their pupils cause sharp pain:
Fierce as they are they cannot bear the blow,
Yet these same particles we never feel,
Either because they do not penetrate, or if
They do, there is a way of free escape;
They do not stay, or hurt our eyes at all.

Now mark and hear the things that move the
mind,

And whence they come. First let me say there are
The images of things that wander round
In all directions, and in many ways,

How
thought
is caused.

T. LUCRETII CARUS

iv., 726-756.

Extremely thin, and, when they meet in air,
They join together, like a spider's web
Or leaf of gold. For thinner sure they are
Than those which reach the eyes, and make us see:
They enter in by the body's pores, and stir
The nature of the mind, fine as it is,
And make it feel. And so it is we see
Centaur's, and limbs of Scyllas, and the face
Of dogs like Cerberus, and the shapes of those
Whose buried bones earth holds in its embrace:
Since images of all kinds still are borne,
Some growing of themselves within the air,
Some coming out of other things, which take
The forms of those they come from. For be sure
No Centaur's image e'er was made from aught
That is alive! Such creature never lived.
But when the image of a man and horse
By chance can come together, they adhere,
And go together, as I've said before,
Because their nature's fine and texture thin.
And others of the kind are thus produced.
And when from lightness they move on with speed
As I have shown, the image subtly rare
With a single stroke can influence our mind:
For the mind is fine, a wondrous nimble thing.
That these things happen you may easily know,
That which we see with mind and eye must be
Produced in similar fashion. Since I've shown
That you can see a lion through the shapes
Of things which touch the eyes, the mind as well
Must likewise so be moved, by images
Of lions and of other things it sees,
Just like the eyes, save that it sees the things
Which are more thin in texture; so it is

Sight of
mind and eye
due to the
same causes.

ON THE NATURE OF THINGS

iv., 757-784.

When sleep has lulled our members to repose,
The mind's intelligence is on the watch,
Which could not be unless the images
Which touch our sense by day are with us still,
So much so that we even seem to see
The man who's gone, whom death and earth hold
fast.

This nature brings to pass in such a way
Because the body's senses are unstrung,
Its members rest, and it cannot reply
To what is false by truth. The memory's dead,
It's hushed in still repose, nor does protest
That he is in the grasp of death and doom,
Whom our mind surely thinks that it can see.
And further 'tis not strange that images
Are moved, and throw about their arms and limbs
In rhythmic order: for in sleep sometimes
An image seems to do so: when the first
Has disappeared, and another comes
In different posture, then the former seems
To have changed its attitude. You must conclude
That this is done with great celerity.
So great the quickness and the store of things,
So great in any period we can see
The store of atoms that can be supplied.

Problems of
thoughts and
dreams.

Full many questions rise, and much remains
To be explained, if we would wish to give
A full account. For first we ask how 'tis
When any man a fancy takes for aught,
The mind at once thinks of that very thing.
Do images keep watch upon our will,
And when they know, rush to present themselves,
Whether it be in sea, or land, or sky?
Assemblies, vast processions, banquets, fights,

T. LUCRETIVS CARVS

iv., 785-815.

And all things else, does nature at a word
Create and lay before us? Aye, ev'n when
To others in the very self-same spot
Their mind is thinking of quite different things.
What shall we say, when images we see
Proceed in rhythmic order in our dreams,
And move their pliant limbs, while all the while
One arm upon another still they raise
In nimble fashion, and in turn present
Before our eyes each gesture in its turn
With foot that moves in tune. Yes, images
Are full of art, and wander still prepared
By night to furnish us with sports like these.
Or is this rather true, that in one time
Which we are conscious of, when but one word
Is spoken, many times lie hid
That reason can discern, and so it is
At any one, in any place you like
These images are ready to appear?
And yet because they are so thin, the mind,
Without an effort, cannot see them there,
And all save those it has taken to itself
Must pass away. So it prepares itself,
And hopes to see the things that are to come:
And so they come. Do you not see the eyes,
When they begin to look at tiny things,
Prepare and strain themselves, or otherwise
We could not see distinctly? Thus you may
In things that are quite plain, soon recognise,
If you don't keep your mind upon the stretch,
'Tis just as if the thing were far removed
In time and place. What wonder is it then
If all escapes the mind, save those on which
Its whole attention's fixed. From little things

ON THE NATURE OF THINGS

iv., 816-843.

Too wide the inference we often draw,
And so enmesh ourselves in self-deceit.

Sometimes it happens that an image comes
Of different kind, what was a woman first
In our hands now appears to be a man,
Or one of different face and age succeeds;
No wonder, 'mid forgetfulness and sleep.

Things not
made for use
but used be-
cause there.

Herein you should desire with all your might
To shun this fault, this error to avoid
By due precautions, lest you should suppose
The bright lights of the eyes were made that we
Might see, or that in order we might take
Long steps, our ankles and our thighs, which
stretch

Up from our feet, are made to bend: or yet
That the forearms were to the shoulders matched
Above, and hands on either side arranged
That we might get what use requires for life.
And other things, which men allege like this,
All wrongly put effect for cause, since naught
Was born in us for use: but what was born
Itself begets the use of various parts: *
We could not see until the eyes were made,
Nor speak before the tongue; the tongue was made
Long before language came, the ears before
A sound was heard, and all our members were
I trow before their use was brought about:
They did not grow in order to be used.
But contrariwise, these fightings hand to hand,

* Mr. Merrill quotes Voltaire's *Candide*, where Dr. Pangloss says: 'Observe the nose is formed for spectacles. The legs are visibly designed for stockings, accordingly to wear stockings. Stones were made to be hewn and to construct castles, therefore my lord has a magnificent castle. Swine were intended to be eaten, therefore we eat pork all the year round.'

wa

T. LUCRETII CARUS

iv., 844-872.

These wounded limbs and bodies stained with gore
Were long in vogue before bright darts flew round;
And nature prompted us to shun a wound,
Before the left arm learned to use the shield.
To rest the tired body's older far
Than a soft-cushioned bed, to quench the thirst
Than cups. We therefore may believe these things
Which for the uses of our life were made
Have been discovered, that they may be used,
Far otherwise with all those things it is
Which first were born, and afterwards revealed
What was their use: at the head of which we place
Our limbs and senses. So again I say
You cannot think that they were made at first
For that for which we use them now to-day.

Body re-
quires food.

Nor is it strange the body does require
In every living creature food. I've shown
That bodies still in constant flight withdraw
From many things, but most from those which
live;

For they are tried by constant motion still,
And much escapes by sweating, much again
Is breathed out through the mouth, when oft
we pant

In weariness, and so the body thinner grows,
Its nature undermined, and pain ensues.
So food is taken to support the limbs,
Refresh our strength by union with the frame,
And check the wish to eat that spreads along
Through all our limbs and veins: the moisture
goes

To every part that needs it, and the things
Which massed together make the stomach burn,
The liquid scatters when it comes, and so

ON THE NATURE OF THINGS

iv., 873-904.

Quenches the fire, and hinders that the heat
Should parch our frame. In this way gasping
thirst

Is washed out of us, and our hunger goes.

Causes of our
movements.

And now how comes it that we take a step
Whene'er we wish, and move our limbs about?
What cause enables us to push along
This mighty frame of ours, I'll now explain.
And note my words well, images that walk
First to our mind occur, and strike our sense.
Then comes the wish to do so, for no man
Begins to act, until his mind 's agreed
On what it wishes. From this very fact
That first it wills, the image there is formed,
When then the mind has willed to walk and step,
It strikes the force of soul distributed
Through all the limbs and members, this is done
Quite easily, for both are closely joined.
The soul in turn then strikes the body too,
The man is forward urged, and moves along,
The body too is rarified in turn,
The air, being always mobile, as we might
Expect, comes through the pores, and spreading out
Fills up the passages, and makes its way
Through all the smaller parts. In this way then
The body by these causes like a ship
Is borne along by sails and wind. Nor need
We be surprised such little things can steer
So great a body, turn around such mass,
Since ev'n the wind, whose body none can see,
Can drive and push a mighty ship along
Of greatest size, a single hand directs
The course however fast, one helm steers
To any point you like, and one machine

T. LUCRETIVS CARUS

iv., 905-931.

With pulleys and treadwheels can lift on high
A heavy weight, and raise it up with ease.

Cause of
sleep,

Now how familiar sleep bedews the limbs*
With soft repose, and frees the mind from care,
In verses that are few, but sweet to hear,
As is the short song of the swan preferred
To the loud cry of cranes all scattered wide
Amid the southern clouds, I now will tell.
Lend me your ears so fine, your mind so quick,
Lest you deny my tale, and go away
With mind rejecting still the words of truth,
While you're in fault, and cannot clearly see.
Well, sleep arrives when scattered through the
limbs

The soul's force spreads, and part of it is gone,
And part thrust back into the body's depths,
For then the limbs grow slack, and droop away.
For there's no doubt that sense is the soul's work :
When sleep disturbs its action, we must think
The soul has been disturbed, and sent away :
Not all of it: for were it so, our frame
Would lie for ever steeped in chilly death.
But if no part of soul remained concealed
Within our limbs, as fire beneath the ash
Lies hid, how could we kindle once again
Sense through the limbs, as flame from hidden fire?

But by what means this change is brought to
pass,
And whence the mind's disturbed, the body faint,
I will explain. See that I do not waste

* Cf. Milton, *Paradise Lost*, ix. 614:

'The timely dew of sleep
Now falling with soft slumberous weight inclines
Our eyelids.'

ON THE NATURE OF THINGS

iv., 932-963.

My words on wind. First then the body must
In its outer surface, which is still exposed
Most nearly to the air, be buffeted
And struck by frequent blows: and thence it is
All things are covered o'er by hide or shell,
Thick skin or bark. In breathing creatures air
Strikes the interior too, as it comes in,
Or issues forth. Thus as the body is
On both sides beaten, and the blows arrive
By little pores to the body's primal parts
And elements, there gradually ensues
A breaking up. The primal elements
Of mind and body are alike disturbed
In their positions. Then the soul in part
Is driven out, in part retires within:
In part is scattered round the body's frame
And can't unite, and mutual motions make.
For nature blocks their union, and the ways.
So sense departs deep down in close accord
With all the changes that have taken place,
Since there is nothing to support the frame,
The body waxes feeble, all the limbs
Are faint, the arms and eyelids droop, the thighs
Ev'n lying down succumb and lose their strength.
Sleep follows food, because, like air, received
Within the veins, food has a like effect;
That sleep is heaviest which you take when full
Or tired, because that then most elements
Are disarranged, and worn with heavy toil.
On the same lines the soul is forced in part
Still deeper down, a larger part's expelled,
And is more scattered and divided up.

Dreams
follow the
actions we do
in life.

And to whate'er pursuit a man is bound
And has to cling, or whatsoever things

T. LUCRETIVS CARVS

iv.. 904-903.

We've dwelt on much, and strained our mind
to do,

In sleep we fancy we must do the same.
Thus lawyers plead their cause, draw bills of sale,
And generals fight and carry on their wars,
Sailors are ever warring with the winds,
While we pursue our task, and seek to learn
What is the nature of the world around;
When found, relate it in our native tongue.
Other pursuits and arts would seem to come
In dreams like these and mock the minds of men.
When men have given now for several days
Their thoughts to games we usually see,
Though no more present to their sense, they still
Can find fresh avenues by which they can
Find access to their sense in images.
For many days these things present themselves
Before their eyes: ev'n in their waking hours
They see men dance, and move their nimble limbs,
They hear the liquid music of the harp,
The sounding strings, survey the same concourse
And all the varied glories of the stage,
So great the influence of taste and will,
And of the things in which men are engaged,
Nor men alone, but animals as well.
You'll see strong horses lying down still sweat
And pant in sleep, and put forth all their force
To win the prize, the barriers being thrown down.
And dogs of hunters oft in quiet repose
Quite suddenly throw out their legs and bark,
And with their nostrils snuff the air,* as though

* Cf. Tennyson, *Lucretius* :

‘As the dog
With inward yelp and restless fore-foot plies
His function of the woodland.’

ON THE NATURE OF THINGS

iv., 994-1027

They'd found and marked the footsteps of wild
beasts :

And when awaked they oft chase fancy stags,
As though in headlong flight, until again,
Delusions shaken off, they are themselves.
Why ev'n the fawning brood of puppies nursed
At home quite suddenly begin to shake
And drag their body from the ground, as though
They saw strange faces. As the several breeds
Are fiercer, so it seems they must display
More savageness in sleep. The varied birds
Oft fly about, and in the night disturb
With noisy wings the temples of the Gods,
If in sweet sleep they've seen fierce hawks to fly
In swift pursuit, and offer fight. And so
The minds of men engaged in great events
In sleep pursue the same; kings storm great
towns,
Are captured, join in fights, or raise loud shouts
As they were stabbed. And many utter groans
And struggle hard, and as they were being gnawed
By bite of panther or of cruel lion
Fill all the place with cries. And many speak
In sleep of serious things, and have confessed
Their guilt themselves. And many too face death :
Many as though they fell from lofty heights
With their whole weight to earth, are terrified,
And after sleep, quite frightened from their wits,
Can scarce recover, be themselves again,
So stirred they are by their excited mind.
A thirsty man sits down by pleasant spring
Or stream, and well-nigh gulps a river down.
So clearly people in their sleep have thought
That they had raised their dress beside a vase

T. LUCRETIUS CARUS

iv., 1028-1060.

Or urinal, and so have drenched the sheets,
And gaudy Babylonian coverlets.
Then those into the floods of whose young life
Seed first is passing, when maturity
Has stirred it in their limbs, then images
Present themselves of any one you like,
Heralds of a glorious face, complexion fair,
Which stir and irritate the swollen frame,
And make their passion burst forth into action.

Nature of
love and
desire.

This seed of which we spoke is stirred in us
When riper years give strength, the cause may
give

To one man this, and to another that.
And so it is from man man's force alone
Can draw this seed. As soon as it's been forced
From its appointed seat through limbs and frame
It draws together to appropriate spots,
And stirs the places meet for it. They then
Grow swollen with seed, the will is then aroused
To seek the body which has stirred our love:
For all men fall to the side on which there comes
The wound they suffer from, the blood spurts
forth

Towards the place whence we are struck, if near
The foe is covered by our blood. So then
He who from Venus has received a blow
Whate'er it be that wounds him, be it she
That breathes her love upon him, still he draws
Towards the quarter that has given the blow,
Longs to unite and be at one with it,
For mute desire gives presage of the joy.

Love to be
avoided.

This joy for us is Venus, with her comes
The name of love, from her has trickled forth
Into our heart the honeyed bliss of love;

ON THE NATURE OF THINGS

iv., 1061-1086.

Followed by chilly care. For ev'n if she
For whom you long's away, there comes to you
Her image, and her sweet name fills your ears.
You should avoid such images, and put
Away the food of love, and turn your mind
Some other road; and let your passion rest
On some one else, not be confined to one,
And so store up both pain and certain woe.
The sore gains strength, grows more inveterate
By being fed, the madness grows each day,
The misery more severe, unless you treat
The wounds with fresher blows, and when quite
new

Seek Venus through the world and other loves
Or turn aside the motions of your mind.

There is
pain in it.

He who shuns love, is not without the joy
That Venus brings, but can enjoy the gain
Without alloy. Such pleasures surely are
More pleasant for the healthy than the sick—
Lovesick I mean—for at the very time
Enjoyment's at its height, still ebbs and flows
The loving passions with uncertain steps,
Nor is it certain what they next must do
With eye or hand. They grasp, and closely press,
And ev'n give pain, implant their teeth upon
The lips, and crush the mouth with kisses, yet
Not unalloyed the joy, for there are stings
Which drive them on to hurt the very thing,
Whate'er it be, from which the germs do spring,
That causes frenzy. Venus' gentle touch
Breaks the pain's force, the pleasure which they
feel

Reins in their bites; for there is still one hope
That whence the flame is kindled, thence as well

T. LUCRETIUS CARUS

v., 1086-1124.

It may be quenched. Yet Nature shows that all
Is just the other way; in this one thing
The more we have of it, the more our heart
Burns with a fierce desire. For food and drink
We take within us, and as certain parts
They easily fill, the craving that we have
For them is satisfied; but from the human face
And lovely bloom nothing avails to pass
To be enjoyed, but images so light
That lovesick hope soon scatters to the wind.
Just as in sleep a thirsty man will seek
To drink, and nought is given to assuage
The fire that burns within, he seeks to feign
An image of a stream, but all in vain,
And drinking in the flood is thirsty still;
Ev'n so does Venus mock the loving mind
With images, mere gazing on the form
Can never satisfy, nor is there aught he can
Tear off the tender limbs with eager hands
That wander in uncertainty about.

At length when sated is the strong desire
That's gathered up, there comes a little pause
In furious passion; but there comes again
The selfsame madness that there was before,
The frenzy wild when they desire to attain
To what they wish and cannot, nor devise
What art may cure their ill: uncertain thus
They pine away with wounds that none can see.

It is
enfeebling.

Remember too their strength still wastes away,
Their labour naught avails: their life is lived
At another's beck and call: their money goes
Wasted on Babylonian coverlets;
Their duties are neglected, their good name

ON THE NATURE OF THINGS

iv., 1125-1150.

Sickens and dies : while on her feet there smile
Pliant and lovely Sicyonian shoes,
And set in gold green emeralds glow with light,
And sea-green dresses still are worn away,
Drinking with constant use the sweat of love.
The wealth their fathers gained is turned aside
To ribbons for the hair and diadems:
Or to a robe, or dresses which they send
From Ceos or from Caria. With stuffs
Of wondrous beauty, and with viands rich,
Feasts, games and drinking bouts, garlands and
wreaths

And perfumes are prepared ; in vain, in vain,
Since from the very heart of these delights
A bitter something springs, something to sting
Even amid the flowers, as when the mind
All conscience-stricken feels a sad remorse
For wasted years too often spent in sloth,
In brothels ruined, or because the fair
Has said some idle word, half understood,
Which in the lovesick heart burns like a fire,
Or else she casts her eyes too freely round,
Smiles on another, or upon her face
Is found the traces of a mocking smile.

These ills are found in love when all goes well :
But when it's crossed and hopeless you may see
Ev'n with a closed eye unnumbered more :
You'd better be upon your guard before,
And see you're not drawn in. For to avoid
The being entangled in the toils of love
Is not so hard, as, when you're taken once,
To fly the snare, or to escape the mesh,
Which love has woven. Yet, though hindered so
And close entangled you might yet escape,

Still more
when we
are crossed
in love.
Love's
follies.

T. LUCRETIVS CARVS

iv., 1151-1161.

If you were not your own worst enemy,
 And overlooked the blemishes of mind
 And body found in her you seek to win.
 This men oft do, blinded by passion's call,
 And give to women virtues which they ne'er
 Possessed. We see them ev'n deformed and plain
 And make them our delight, and pay them court.
 One lover at another laughs, and bids him
 As one afflicted by unworthy passion
 To pray to Venus, and yet all the while
 Ne'er sees his own mischance, tho' greater still.
 The black he calls brunette, the foul he dubs*
 Quite unadorned, green eyes like Pallas' own,
 The stiff and lanky girl is a gazelle,
 If short and dwarfish she's a very grace,

* This passage has been translated by Molière, *Le Misanthrope*,
 ii. 5:—

'Jamais leur passion voit rien de blâmable
 Et dans l'objet aimé tout leur devient aimable;
 Ils comptent les défauts pour les perfections,
 Et savent y donner favorables noms.
 La pâle est au jasmin en blancheur comparable;
 La noire à faire peur une brune adorable;
 La maigre a de la taille et de la liberté;
 La grosse est dans son port pleine de majesté;
 La malpropre sur soi, de peu d'attraits chargée,
 Est mise sous le nom de beauté négligée;
 La géante parait une déesse aux yeux;
 La naine une abrégé des merveilles des cieux;
 L'orgueilleuse a le cœur digne d'une couronne;
 La fourbe a de l'esprit; la sotte est toute bonne;
 La trop grande parleuse est d'agréable humeur;
 Et la muette garde une honnête pudeur.
 C'est ainsi qu'un amant, dont l'ardeur est extrême,
 Aime jusqu'aux défauts des personnes qu'il aime.'

Cf. too Sheridan's Song in the *School for Scandal*:—

'For let 'em be clumsy, or let 'em be slim,
 Young or ancient I care not a feather;
 So fill a pint bumper quite up to the brim,
 And let us e'en toast them together.'

ON THE NATURE OF THINGS

iv., 1162-1186.

All wit and esprit; if she's large and lumpy,
A marvel full of dignity; tongue-tied,
She cannot clearly speak, she has a lisp,
While she who's mute is bashful; if one be
A hateful odious gossip she's a torch
To set on fire the neighbours round about:
Dying of waste, a slender darling is,
Half dead with cough, a little delicate.
Fat and with swelling form, she's Ceres' self,
With Bacchus at her breast; pug-nosed, why then
She is a Satyress or she-Silenus,
While with thick lips she then is said to be
Most kissable. And other things there are
Too long to mention. Be she what she likes,
With all the grace of Venus in her limbs,
Yet there are others; we have lived before
Without her. And we know full well she does
The selfsame things an ugly woman does,
Drenches herself with scents, poor thing, until
Her maids fly from her with a smothered laugh,
And yet the weeping lover, when shut out,
Oft loads her threshold with his flowers and
wreaths,

Anoints her doors so proud with marjoram,
And plants his kisses on the steps themselves.
And yet, if once admitted, but a breath
Offends his sense, he seeks at once to find
Some specious pretext to depart and go,
Let's fall the deep complaints he's conned so long,
Curses his folly, sees he's given to her
More than is right to mortals to concede.
Our Venuses know this: and they themselves
With all their might conceal what's going on
Behind the scenes, from those they wish to hold

T. LUCRETIVS CARVS

iv., 1186-1287.

Fast bound in chains of love ; in vain, since you
In thought can draw forth all these things she
does

Into the light of day, and note her smiles,
And if she is but fair and free from spite,
Can overlook in turn the faults she has,
And pardon freely human weaknesses.

[Lines 1192-1278 omitted.]

An ugly
woman may
win love.

Sometimes not by the Gods, or Venus' shifts
A sorry woman not so fair is loved.

Such women sometimes by the things they do,
By their engaging manners, by the care
With which they dress, accustom you to pass
Your life with them. And habit too sometimes
Can render love attractive ; what is struck
By oft-repeated blows however light,
In the long run is mastered and gives way.
Do you not see how drops of water fall
On rocks, and after long years wear them through?

End.

ON THE NATURE OF THINGS

BOOK V.

v., 1-24.

Epicurus
worthy to
be a God.

WHAT puissant mind is there to build a song
Worthy to tell of these majestic things,
These great discoveries? Or who in words
Can, as he merits, frame the praise of him
Who left to us such prizes to enjoy
By his own genius first acquired and won?
None, as I think, of mortal race there is
If we must speak, as fits their high import.
It was indeed a God, a very God
Who, noble Memmius, found the plan of life
Which now is termed philosophy, whose skill
Has freed our life from such a billowy sea
And such thick darkness, and has set it safe,
In such tranquillity, such light to dwell.
Just think of all in days of old men learned
When prompted by the Gods: Ceres is said
To have given corn to men, Bacchus the juice,
The vine-born juice, though life, it well might be,
Could do without them, as the story is
That other nations do. Yet still 'tis true
Without a heart sincere there could not be
A happy life: and therefore all the more
We deem this man a God, from whom there come
Ev'n now sweet solaces to give us ease,
Which widely spread can soothe the minds of men.
If you should think the deeds of Hercules
Surpass this man's, then reason answers No.
What matters now to us the gaping jaw
Of the Nemean lion, or the boar,

T. LUCRETIUS CARUS

v., 25-51.

Arcadia's dreaded boar? or what the bull
Of Crete, or the Lernean plague itself,
The hydra with its guard of poisonous snakes?
Or threefold Geryon's triple-breasted might?
They could not harm us. Or the birds that dwell
In the Stympalian swamps, or ev'n the steeds
Of Thracian Diomedè, that breathed forth fire,
Beside Bistonian coasts and Ismara?
Or what the serpent's terrible aspect, that guards
The golden apples of the Hesperides,
Girdling the trees with his enormous mass,
Beside the Atlantic's shore, and sounding waves,
Which none of us go near, nor dare approach
Ev'n barbarous men? What harm then could
they do?

And other monsters of the sort, ev'n if
They're not already killed, what harm in them?
None, as I think. The earth already swarms
With wild beasts, and is filled with trembling dread
Through groves and mountains high and woods
profound.

But such we can avoid. Unless the heart*
Is clean, what strifes and dangers will there be
Around our path, ev'n in our own despite!
How great the bitter cares of lust that rend
Man's troubled heart, what fears do follow them?
What pride, what filth, what wantonness there is!
And what disasters come of them! what sloth
And luxury! He who subdued them all,
Expelled them from the heart by words, not
arms,

Is it not fitting that he should be placed

* Cf. Ps. li. 10: 'Create in me a clean heart, O God, and renew a right spirit within me.'

ON THE NATURE OF THINGS

v., 52-81.

Among the Gods? and all the more that he
Was wont to utter precepts quite divine
About the Gods, and nature's plan explain.

How things
were made
without
the Gods.

Whose steps I follow, and his reasoning trace
And teach in words, according to what law
All things were made, how needful 'tis for them
To abide by it, nor can they e'er annul
The binding statutes of the past. In which
It has been shown, the nature of the mind
Is formed of body, that has had a birth,
And can't endure unscathed the shocks of time,
But images are wont to mock the mind
In sleep, when those whom life has left we seem
To see; for what remains, my plan has brought
Me to this point, that I must show the world
Of mortal body's framed, and once was born:
And in what way the assembled matter formed
The earth, the sky, the sea, the stars, the sun,
The circle of the moon: what animals
Sprang from the earth, and which were never
born.

And how the race of man began to use
Such varied speech, such different names of things:
And how the fear of gods beset their minds,
Which makes them guard as holy through the
world

Shrines, lakes and groves, and images set up,
And altars to them. And I then will tell
How guiding nature by its power directs
The courses of the sun, the wandering moon,
Lest we should think between the sky and earth
Spontaneous they pursue their constant way,
Affording growth of crops and living things,
Or fancy that they roll by God's design.

T. LUCRETIVS CARVS

v., 82-101.

Ev'n those who've learned so wisely that the
Gods*

Lead an untroubled life, if they should ask
In wonder how all things are carried on,
And chiefly those which we can see above
In the ethereal realms, return again
To old religious scruples and acclaim
Hard masters, whom, poor wretches, they suppose
Almighty are, not knowing what can be,
Or what cannot, or on what plan is given
Set power to each, deep bounds they cannot pass.

The world
is mortal
and will be
destroyed.

And now apart from further promises,
Look at the sea, the land, the sky, whose forms,
So widely different, Memmius, each from each,
Triple in nature, texture, shape, a day,
A single day, destroys: and all the mass†
And fabric of the world so long upheld
Will vanish. Nor yet can I fail to see
How new and strange it strikes upon the mind,
This ruin of the earth and sky to be,
How difficult it is to prove the fact,
As happens when you for the first time bring
A wonder to the ears, which can't be seen‡

* Horace, *Satires*, i. 5, 101, declares himself as being among these, 'Namque deos didici securum agere ævum,' and therefore he was 'Parens deorum cultor et infrequens' (*Odes*, i. 34), in which, however, he declares he was converted to other views by a thunderbolt which fell, and he concludes that after all

'A god reigns

Potent the high with low to interchange.'

† Ovid, *Amores*, i. 15, 23, says, referring to this line:

'Carmina sublimis tunc sunt peritura Lucreti
Exilio terras cum dabit una dies.'

‡ Cf. Tennyson, *Enoch Arden*:

'Things seen are mightier than things heard.'

ON THE NATURE OF THINGS

v., 102-132.

Or handled by you, processes by which
As by a road well furnished and equipped
Belief most easily steals into the mind.
Yet I will speak: it may be facts themselves
Will justify my words, and you will see
Earthquakes arise within a little time,
And all things shattered. This may ruling fate
Keep far from us, and reason, and not facts,
Convince that all may end in hideous crash.

No sacrilege
to deny it
is the work
of the Gods.

And yet, before beginning to pour forth
Stern fate's decrees, with far more sanctity,
Far surer reason, than the priestess, who
In Pythian shrine speaks out from Phoebus' seat
And laurel crown, I will unfold to you
Much solace in my words, lest you should think,
Led by religious awe, earth, sun and sky,
Sea, stars and moon for all eternity
Must last as now they are: and further hold,
That, like the giants, they must pay the price
For their great guilt, who by their reasoning thus
Displace the world's foundations, and would blot
The sun from heaven, branding immortal things
By mortal names: which things in truth are far
From being divine, and most unworthy are
To be among the Gods, nay rather may
Be held to show what is devoid of sense
And vital motion. Sure it cannot be
The nature and the judgement of the mind
With any body, that you like, exist:
Trees do not grow in air, nor clouds in sea,
Nor fishes live in fields, nor blood in wood,
Nor sap in stones. It surely is ordained
Where each can grow and be. And so the mind
Cannot arise without a body, nor

T. LUCRETIUS CARUS

v., 133-164.

Live far away from sinews and from blood.
But if (as is more likely) the mind's power
Could be in head, or shoulders, or in heels,
Or any other part, it would remain
Still in the self-same man as in a vase.
But since in us 'tis fixed and sure ordained
Where soul and mind can be and grow apart,
We must the more deny that it can live
Out of the body and the living form,
In crumbling clods of earth, or in the sun,
In water, or the realms of heaven on high.
So these things sure are not endowed with sense
Divine, since they have not ev'n life itself.

The Gods
have no
abodes on
earth.

And surely you cannot believe there are
Seats of the Gods in any part of earth.
For the fine nature of the Gods is far
Withdrawn from all our senses, and the mind
Can scarcely grasp it: since it has escaped
All touch and stroke of hand, it cannot touch
Aught that we touch ourselves: what can't be
touched
Can't touch. And so their seats must be unlike
To ours, as fine and rare as are themselves,
As I will later prove at greater length.
To say that for the sake of man they wished
To frame the glorious fabric of the world,
And therefore we should praise their wondrous
work,
And think that it will last for evermore,
That 'tis impiety to shake by force
From its fixed seat what long has been ordained
By forethought of the Gods for all mankind,
And for all time, or to assail in words
And overturn the notion utterly,

ON THE NATURE OF THINGS

v., 165-195.

And other figments of the fancy add,
This, Memmius, is folly. What can we
Confer on blessèd and immortal ones,
That they should aught administer for us?
Or what new incident could make them wish,
So long at rest, to change their former life?
Life it would seem lay sunk in deepest shades
Of woe, till dawned the origin of things.
Whom old conditions vex, 'twere fit that he
Rejoice in new ones: but to whom there's been
No trouble in the past, who's led a life
Of pleasant ease, what could arouse in him
A love of change? What ill to us had been
If we had ne'er been born? For he once born
Must long to live, as long as pleasure lasts.
But he who's never tasted love of life,
Has never been enrolled upon the list
Of living men, what matter had he ne'er
Been born at all. And whence again was first
Implanted in the Gods, the form in which
Creation must take place, and man be made,
So that they knew just what they wished to do?
How was the power of atoms first made known,
What they could do by changes 'mongst themselves,
If nature had not shown them what to do
And given a model? So from early days
In many ways these atoms being struck
By blows, and kept in motion by their weight,
Were wont to travel on, and in all ways
Become united, and test every form
Which they by combination could effect,
So that it is not strange, that they have come
Into such dispositions and such ways,
As form the universe we see to-day,

T. LUCRETII CARUS

v., 195-219.

And keep it everlastingly renewed.

The world
too
imperfect
to be made
by Gods.

Ev'n if I did not know what atoms are,
Yet this I'd venture to affirm, from what
I see of heaven, and many things beside
Point the same way, that not for us was made
By Gods the nature of the things we see:
So many faults there are. In the first place
Of all the space vast heaven reaches o'er,
A part is taken up by savage hills
And woods of wild beasts full; 'tis held by rocks,
Waste marshes, and the severing main which
parts*

The different lands, over two-thirds of it
Fierce burning heat and constant cold bear sway,
And take away its usefulness from men.
What's left for tillage nature by itself
Would choke with thorns, if man's own power
did not

Resist, accustomed as he is to groan
Beneath the heavy hoe, and cleave the earth
By pressing down the plough. If we did not
By turning up the fruitful clods with share,
And working up the soil, bid crops to rise,
They could not of themselves avail to spring
Into the liquid air: and even then
Crops won by heavy toil, when they put forth
Their leaves and blossoms over all the land,
The sun above with burning heat destroys,
Or sudden showers and icy frosts lay low,
And blasts of storm with furious whirlwinds vex.
And why does nature nourish and bring forth
Dread herds of wild beasts, dangerous to man

* Cf. Horace, *Odes*, i. 3, 22: 'Dissociabilis oceanus.'

ON THE NATURE OF THINGS

v., 220-246.

By land and sea? why do the seasons bring
Disease? why stalks abroad untimely death?
The baby, too, just like a sailor tossed
By cruel waves, lies naked on the ground,
Poor child, bereft of every means of life,
As soon as it has left its mother's womb
In throes of birth, and fills the room with squalls,*
As is but meet for one who has to pass
Such ills in life. But flocks and herds and beasts,
All grow of various kinds, no rattles want,
No bland and broken voice of gentle nurse
Need be addressed to them, nor do they need
Their clothing changing with the time of year:
They need no arms, no lofty walls to guard
Their own, since earth itself and nature, too,
Skilful artificers, produce them all.

The world
is mortal,
and why?

And first of all since the mass of earth itself,
And water, and the light breath of the air,
And burning heats, of which the universe
Seems framed, do all consist of substance, which
Was born and dies again, it follows that
The universe is subject to like law.
Those things whose parts and members had a birth
And yet are mortal, these we see must die,
As they were born. Since then I thus can see
The chiefest parts and members of the world
Die down and are renewed, I may be sure
For heaven and earth as well there's been a time
When they began, a time when they will die.

* Cf. Shakespeare, *King Lear*, iv. 6:

'Thou knowest the first time that we smell the air
We brawl and cry . . .
When we are born, we cry that we are come
To this great stage of fools.'

T. LUCRETII CARUS

v., 247-271.

And do not think herein that I have seized
On this point for myself, that earth and fire
Are mortal, nor have doubted that the air
And water perish, and have said that they
Are born again and grow; remember first,
Part of the earth, burnt up by constant suns,
Worn by the foot of man, sends forth a cloud
And flying streams of dust, which furious winds
Distribute through the air. Part of the soil
Is ruined by the rains, while gnawing streams
The banks destroy. Beside whatever gives
Increase to something else, is in its turn
Renewed itself, and since without a doubt
Our common mother is our common tomb,*
Earth suffers loss, and waxes yet again.

Water, too,
is ever
changing.

For what remains, that fountains, seas, and
streams
Are ever full, that waters ever flow,
It needs no words to prove: the mighty rush
On every side declares it. But whate'er
Of moisture's on the surface passes off,
And so there never is too much, because
Partly the strong blasts sweeping o'er the seas
Diminish it, as does the ethereal sun
Lessening the moisture by his rays: and then
That partly 'tis distributed below
Through all the earth†: the salt is strained off,

* Cf. Shakespeare, *Romeo and Juliet*, ii. 3:

'The earth, that's nature's mother, is her tomb;
What is her burying grave, that is her womb.'

† Lucretius describes here his idea of a water system in which the water gets back underground from the sea to the springs and river-heads. He refers to it again, vi. 634. Virgil has the same idea, *Georgics*, iv. 363:—

'Now through the kingdoms of the waves he goes
And wonders at his mother's dwelling-place.'

ON THE NATURE OF THINGS

v., 272-293.

The moisture stays behind, and meets in one
At the fountain heads of streams, from whence it
flows

With pleasant current o'er the land, where'er
The scooped-out channel has the way prepared.

And air,
too, is ever
changing.

And now to speak of air, which every hour
Is altogether changed in countless ways.

Whatever things may lose, is ever borne
Into the sea of air,* and did it not
Give something back to things, recruit their force
As they flow on, all soon were at an end
And turned to air: it ever is being born,
And ever passes back to things again,
Since all things surely are in constant flow.

Fire is
mortal.

Likewise, the bounteous source of liquid light,
Ethereal sun, assiduous floods the sky
With brightness new, and fresh light still supplies:
For what was there at first, fall where it may,
Is lost entirely. This is easily seen.
As soon as clouds begin to veil the sun,
And intercept its rays, the part of them
Beneath quite disappears, the earth wherein
The clouds are borne is overshadowed, dark:
So that you see things ever need new light,
Each earliest shaft of light is still destroyed,
And in no other way can things be seen
By sunlight, if the fountain head itself

Marvellous pools in rocky caverns pent,
Strange forests echoing the ceaseless surge,
Till, with the whirl of mighty waters dazed,
Before him roll the rivers of the earth,
Each from its several source in endless flow
Beneath the girdle of this vasty world.'

* Cf. Shakespeare, *Timon*, iv. 2:

'We must all part into this sea of air.'

T. LUCRETII CARUS

v., 291-323.

Do not supply the light perpetually.
 Nay, more, the lights at night, which are on earth,
 The hanging lamps, and torches bright with flames
 Amid the darkness, hasten on likewise
 By heat new light to give, they're quick, how quick
 To flicker with their flames, and so the light
 Uninterrupted is, and never dies.

So speedily by birth of newer flame
 Is the destruction of the old concealed.
 So then we must believe sun, moon, and stars
 Shed light from new supplies for ever born,
 And ever lose the first, lest you should think
 They flourish with inviolable strength.

Even the
 strongest
 things
 wear out.

And see you not how stones are worn by years,
 High towers fall down, and rocks can rot away,
 The shrines and images of Gods wear out
 Weary and worn, nor does the sacred power
 Prolong the bounds of fate, nor aught avail
 'Gainst nature's laws? Do we not see beside
 Men's monuments decay, the solid iron
 And brass grow old, rocks riven from high hills
 Rush headlong down unable to withstand
 The force of years, the force of finite time?
 They would not fall so suddenly uptorn,
 If from infinite time they had endured
 The wrackful siege of battering days unhurt.*

The sky
 is mortal.

Look at the sky which in its wide embrace
 Around, above, holds all the earth, if it,
 As some declare, out of itself begets
 All things, and takes them back when they're
 destroyed,
 It must have had a birth, be doomed to die.

* Cf. Shakespeare, *Sonnets*, lxxv. :

'The wrackful siege of battering days.'

ON THE NATURE OF THINGS

v., 323-348.

For what gives food and increase to the rest
Must suffer loss, and then increase again.

If the world
is immortal,
how is it
that there are no
records of its
earlier days?

Besides, if there had been no birth of earth
And sky, if they had been eternal, why
Long, long before the Theban War, and Troy
And its sad fall, were there no other bards
To sing of those old days? * or whither have
So many feats of heroes passed away,
Nor live on everlasting monuments
Of fame enrolled? The truth I think is this:
The universe is new, quite fresh the world,
Nor long ago begun. Why there are arts
Which even now receive the final touch,
Ev'n now advance; how much is now being learned
Of ships; not long ago musicians gave
Us tuneful melodies; and lately too
Great Nature's plan has been revealed to us,
And I, the first of all, have now been found
To tell it in my country's native tongue.
But if you think these things were here before,
But that the race of men was then destroyed
By burning heat, or that their cities fell
In some great earthquake, or that swollen by rain
Devouring rivers flowed upon the land
And overwhelmed their towns, so much the more
Must you admit that earth and heaven will be
At last destroyed. For when things were assailed
By perils and diseases such as these,
Had more disastrous cause pressed on them then,
Then death and ruin had ensued. No other way

* Cf. Horace, *Odes*, iv. 9:

'Vixere fortes ante Agamemnona
Multi: sed omnes illacrimabiles
Urguentur ignotique longa
Nocte, carent quia vate sacro.'

T. LUCRETIUS CARUS

v., 349-376.

Do we seem doomed to death, than that ourselves

We sicken from the same diseases still

As those, whom nature has removed from life.

Again, whatever stands eternal must

Do so because its solid frame repels

All hostile blows, nor suffers aught to intrude

Which could unloose the close-knit parts within,

As matter does which we've before described :

Or else because it lasts eternally,

As being exempt from shocks, as is the void

Which unassailed remains and suffers not

From any stroke ; or else because there is

No space around, to which things can depart

And be dissolved, as is the universe,

In which there is no place beyond, to which

They thus can leap apart and be dissolved,

Nor aught to fall upon them, and destroy

With powerful blows. But as I've shown before,

The nature of the world is not endowed

With solid body, since it's mixed with void,

But not mere void, for bodies do not lack

Which gathering might from out infinity

May overthrow this universe of ours

With whirling storm, or down upon it bring

Some other perilous disaster dire.

Nor is there wanting room and space, in which

The world's foundations might be scattered wide,

Or perish by some blow. And so we see

The gate of death to heaven is not barred,

Nor to the sun, or earth, or ocean's waves,

But open stands with huge wide-gaping maw,

And waits its victims. So you must admit

That these things had a birth, for things possessed

It fulfils
none of the
conditions of
immortality.

ON THE NATURE OF THINGS

v., 377-464.

Of mortal body never could have dured
From time infinite to the present hour
The mighty strength of immeasurable years.

It will come
to an end.

Then since the chief components of the world
Fight so among themselves, are ever stirred
By unholy civil war, do you not see
Some limit may be placed to their long strife?
Perhaps when the sun's heat has won the day,
And drunk all moisture up, its settled aim
Not yet accomplished, so much is supplied
By rivers threatening in their turn to overwhelm
All things with deluge from deep ocean's gurge;
Yet all in vain, since the winds that sweep the sea
Still keep it down, with the ethereal sun
Dissolving still its waters with his rays,
And trust that they can dry its moisture up,
Before its project's gained. So great the war
Which they breathe out, so doubtful is the strife,
Engaging one another still for such
Great ends; though once, they tell, how fire
Did win the day, and once how water reigned
O'er all the fields. Fire won the day, licked up,
And wasted many things, when the mad force
Of the sun's steeds strayed from their proper course
And hurried Phaethon through all the sky
And over all the earth. But the great sire
Almighty, stirred with rising wrath, dashed down
Presumptuous Phaethon with sudden stroke
Of thunder to the earth, and the sun then
Him meeting as he fell, received the lamp,
The everlasting lamp of the great world,
Subdued his scattered steeds, and yoking them
All terror-stricken to his car again,
Renewed his course, subjecting all to rule.

T. LUCRETIUS CARUS

v., 405-437.

So sang Greek poets of the days gone by :
But very far from truth. For fire may gain
The day, when its matter gathering in strength
From the infinite void comes on : and then
Its forces fail, o'er-conquered in their turn,
Or else things perish all burned out with flames.
And water too, 'tis told, once won the day
And many towns o'erturned, and when its force
From the infinite gathered, by some power
Was turned aside retreating, then the rains
Were stayed at length, the rivers lost their power.

✓
The making
of the
World.

But in what way this gathered matter formed
The earth and sky and sea, the sun and moon,
I now will tell in order. Surely not
By deep design it was, nor clever mind,
That atoms settled in their proper place,
Nor was it by a concert 'mong themselves
They fixed their courses, but it was because
Atoms in many ways, of many kinds,
Impelled by blows, were borne by their own weight
From time infinite to collect together
In every sort of way, and still to try
What fresh they could by union create.
And so it is through æons wide diffused,
Trying each motion and each union still,
They met together, and those masses formed
Which were the rudiments of those great things,
The earth, and sea, and sky and living things,

The seeds
of earth
gathered in
a sort of
storm.

Yet even then the circle of the sun
Flying aloft could not be seen, nor yet
The stars that light the world, nor sea, nor sky,
Nor even earth nor air, nor anything
Like what we have, but a strange storm of things,
A mighty mass of atoms of all kinds,

ON THE NATURE OF THINGS

v., 438-466.

Whose clashing stirred the interspaces, ways,
Connections, weights and blows, their unions,
Their courses too, in battle set arrayed,
By reason of their different shapes and forms,
Which could not all remain in union
Nor have harmonious motions for themselves.
So then they flew asunder, like to like,
Marked out the world, its members portioned out,
Distributed its parts, to separate
The sky from earth, allow the sea to lie
Apart with all its waters, and the fires
Of æther to remain alone, unmixed.

The heaviest
went to the
bottom.

And, first of all, the several parts of earth
Being heavy, mixed together, met and took
The lowest places: the more mixed they were
The closer that their union was together,
The more they squeezed out those which then
became
The sea, the stars, the moon, the sun and all
The world's great walls. And all of these were
formed
Of light round atoms and much smaller things
Than was the earth. And then through openings
fine,
Outbursting from the earth,* the ether rose
Fire-bearing ether, with its many flames;
Just as we often see at early dawn,
When the sun's bright rays blush golden o'er the
grass,
Sparkling with dew, and pools and rivers then
Exhale a mist, and earth itself almost

* Cf. Milton, *Paradise Lost*, iii. 716:

'And this ethereal quintessence of heaven
Flew upward.'

T. LUCRETIUS CARUS

v., 467-497.

Appears to smoke, when all of these aloft
Are met together, then do clouds on high
With solid body cover up the sky.
'Twas thus the light diffusèd ether spread
And arched itself all round towards every part,
And hemmed in all things round with greedy
grasp.*

Then followed on with birth of sun and moon
Whose spheres turn round 'twixt ether and the
the earth,

Whom neither earth nor ether has annexed,
Not being so heavy, as to settle down,
Nor yet so light as to pursue their way
In topmost coasts: and yet so placed between
The two, that living they roll on and are
Parts of the world, just as in us some part
May be at rest, while others move along.
Then these withdrawn, the earth, where now there
spreads

The ocean's blue expanse, fell in at once,
And flooded all its trenches with salt gurge.
And daily, as the sun's and ether's heat
Forced with repeated blows to a solid mass
The earth to its furthest bounds, so that condensed
It gathered to its centre, so the more
The moisture forced from it increased the sea
And ocean's floating fields by oozing forth,
And evermore the parts of heat and air
Escaped and flew abroad and there condensed,

* Cf. Milton, *Paradise Lost*, vii. 264:

'Expanse of liquid pure
Transparent elemental air diffused
In circuit to the uttermost convex
Of this great round.'

ON THE NATURE OF THINGS

v., 498-517.

Far, far from earth, the glittering realms above.
The plains sank down, the lofty mountains grew;
For rocks could not subside, nor all the parts
Sink to one common level all throughout.

The ether.

Thus grew the massive earth with solid frame,
And all the slime to the very bottom sank
And there remained like dregs. The sea, the air,
The fire-clad ether, all are left behind
With bodies clear: some lighter than the rest;
And ether, the most light, most liquid, too,
Floats on the airy breeze, nor ever joins
Its liquid body with the heaving airs;
These things it lets be whelmed by furious storms,
Disturbed by wayward winds, while its own fires
It gliding bears along with changeless sweep.
That ether can thus flow with steady stream
And with one effort, Pontus shows whose flood*
Glides ever on and keeps its course unchanged.

The stars.

Now let us sing the motions of the stars.
First, if the sphere of heaven rolls, 'tis clear
On either side the air must press the pole,
Hold it outside, close in at either end;
Another flows above and reaches where
The everlasting stars still roll and shine;
Or yet another's underneath to bear
The world upward, as we see that streams
Turn wheels and water-scoops. It may be, too,
That heaven is fixed, the glittering signs move on;
Either because the fires of ether are

* Cf. Shakespeare, *Othello*, iii. 3.

'Like to the Pontic sea,
Whose icy current and compulsive course
Ne'er feels retiring ebb, but keeps due on
To the Propontic, and the Hellespont.'

T. LUCRETIUS CARUS

v., 518-549.

Shut in, and seeking egress roll about
And cast their flames through heaven's vast
domains;

Or else the air blowing from the outside
Drives on and whirls the fires, or that they go
Themselves to where their proper food invites,
Feeding their flaming bodies everywhere.
Which cause is right 'tis difficult to say:
What can and is being done throughout the whole,
In various worlds all formed on different plans,
'Tis that I teach and several causes give
Which may explain the motions of the stars
Throughout the universe: and one of which
In this world too must make them all to move;
But which it is, it is not for a man,
Whose reasoning step by step proceeds, to say.

How the
earth is
borne up.

That earth may rest in the centre of the world,
'Tis meet its weight should lessen by degrees
And dwindle down; that it should have beneath
Another substance joined from early years
And aptly fitted to those airy parts
Of the world in which it lives. And so it is
No weight, nor does weigh down the air, just as
A man's limbs are no weight to him, nor does
His head weigh down his neck, nor do we find
The body is a burden to the feet;
The weights which come from outside, these are
they

Which hurt when laid on us, although they're less;
So much it matters what things have to do.
So then the earth is not some alien mass
Forced from elsewhere on alien air, but was
Conceived with it at the world's primal birth,
Is part of it, just as our members are

ON THE NATURE OF THINGS

v., 550-577.

Of us, it seems. Again, the earth when struck
By thunder suddenly shakes all above,
And this it could not do unless it were
Close tied to heaven above and the upper air.
They cling together by a common bond
From their first birth, conjoined together still.
And see you not how great a weight of frame
Our soul supports for us, thin though it be,
Because they are conjoined and fitted close
The one to the other? What can lift our frame
With nimble bound, except it be the force
Of mind which rules our members? Don't you see
What power a subtle nature has, ev'n when
To heavy body joined, as air to earth,
And as the force of mind is to ourselves?

The sun
and moon
of the size
we see them.

Again, the sun's disk cannot greater be,
Nor his heat less than to our sense appears;
For from whatever distances such fires
Can reach us with their light, and breathe warm
heat

Upon our limbs, they lose naught of their flames,
Nor is the fire contracted by the space
That intervenes. So since the sun's bright light
And heat thus reach our sense, and cheer the
place

On which they fall, its form and size as well
Must sure be seen: you cannot add to it,
Nor aught take off. And then the moon itself,
Whether it cheers the world with borrowed light*
Or sheds it from itself, whiche'er it is,
Its form can be no greater than it seems

* Cf. Catullus, xxix. 15.

'Potent Trivia is thy name,
Luna, decked with borrowed flame.'

v., 578-611.

To our own eyes. For all we see afar
 Through distances of air looks dimmed before
 It is at all diminished; so the moon,
 Since it presents a clear form, well defined,
 Is seen by us on high just as she is:
 Clear-cut in all its edges, of the size
 She really is. Lastly, whatever fires
 You see in ether—just as those we see
 On earth—if but their flickering is distinct,
 Their brightness seen, they sometimes seem to
 change

But very little either way, just as
 They're distant more or less—so we may know
 These fires are little smaller than they look,
 Or larger only by a small degree.

How its
 heat and
 light are
 caused.

Nor is it strange, small as it is, yon sun
 Emits the light, which flooding sea and land
 And sky bathes all around in burning heat.
 It well may be that hence for all the world
 A bounteous fountain opened out bursts forth,
 And shoots forth light, because the elements
 Of heat meet from all sides from all the world,
 And flow together so that their warm light
 Streams from a single head. Do you not see
 How small a spring can flood the fields around,
 And bounteous fill the plain? Or it may be
 That heat from the sun's flame by no means great
 May infect the air with burning fire, if the air
 Is ready haply, and in proper state
 To be thus kindled by a little heat.
 Just as we often see a single spark
 Can light the corn and stubble far and wide.
 Perhaps, too, the sun with rosy lamp on high
 Has round him stores of fire with hidden heat,

ON THE NATURE OF THINGS

v., 612-642.

Marked by no radiance, which can yet increase
All full of heat the volume of his rays.

Its orbits.

Nor is it clearly stated how the sun
Passes from summer quarter and draws near
His winter turning-point in Capricorn,
And thence returning takes himself again
To the solstitial goal of Cancer; nor
How in a month the moon can travel o'er
The space it takes the sun a year to go.
No clear and simple reason is alleged:
It well may be, as the opinion
Of that good man Democritus laid down,
The nearer that the stars are to the earth,
The less on them the force which heaven's whirl
Exerts. Its rapid force, he says, gets less
When nearer earth, its power diminishes,
And so the sun is left with the rearward signs,
Being lower than the signs, which burn so bright.
And yet far more the moon: the farther that
Her course from heaven is, the nearer earth,
The less can she keep pace with the other signs.
For as more feeble grows the whirl, in which
She still is borne, though lower than the sun,
So much the other signs can pass her by.
And therefore 'tis her course appears to come
More quickly back to them: they come to her.
It may be too, from quarters of the world
Lying across his path, the air may stream
At different seasons in alternate ways,
One which can push the sun from summer signs
To his winter turning-point, and chilly cold,
And one which brings him back from the cold
shades
To summer quarters and the blazing signs.

T. LUCRETIUS CARUS

v., 643-665.

In the same way the moon and stars which roll
Vast years in mighty orbits, we must think,
By opposing airs are moved alternately.
Do you not see how stirred by varying winds
The lower clouds oft move in ways opposed
To those above? Why should the stars not be
Borne on through mighty orbits in the air
By different currents, as the others are?

Night. Night shrouds the earth in darkness, either when
After long course the weary sun has reached
The heaven's last bounds, blown out his sinking
fires

Exhausted by their travel, worn away
By passage through the air, or else because
The force which bore his orb above the earth,
Now makes him change his course and pass be-
neath.

Dawn. Likewise at a fixed time Matuta* sends
The roseate dawn through heaven's coasts, and
spreads

The light, either because the self-same sun
Returning 'neath the earth, seizes the sky
Before his time, and hastes to light his rays:
Or else because the fires together come,
And many particles of heat unite,
At a fixed hour, which in their turn bring forth
Fresh light of sun continually renewed:
Ev'n as they tell from Ida's lofty height
Are seen, when light begins, dispersèd fires,
Which gathering in one ball make up a globe.

* Matuta was the Goddess of Dawn. Homer's famous epithet is 'the rosy-fingered dawn'; and Milton, *Paradise Lost*, xi. 173:

'See the morn brings
Her rosy progress smiling.'

ON THE NATURE OF THINGS

v., 666-696.

Nor should it strike as strange, these seeds of fire
Can stream together at so fixed a time,
And the sun's light renew. For everywhere
Things happen at fixed times. Thus at fixed time
Trees blossom, at fixed time they shed their flower;
Age bids the teeth to fall, the hairless youth
Grow hairy with soft down, and lets soft beard
On either cheek appear, all at fixed time.
And lastly thunder, snow, showers, clouds, and
winds

Take place at periods fairly fixed. And so
Where the first causes have been so, and where
Things from the first beginning so fell out,
Still in fixed order they come round again.

Length of
night
and day.

Days too may longer grow, and nights may wane,
And light be minished as the nights increase:
Either because the sun below the earth
And then above, in curves unequal, still
Divides the coasts of ether, and his course
Into unequal parts: and what he takes
From one, he gives the other, until he
Comes to the sign of heaven in which the node,
Which is the point at which their courses cross,
Makes equal day and night. For at a point
Midway between the north blast and the south,
Heaven keeps its turning-point with equal lengths,
Due to the way the starlit globe is placed,
Through which the sun creeps on for a whole
year,
Lighting the earth and heaven with slanting ray,
As those have shown who have mapped out the
sky
And decked it with the signs, or else it is because
The air is thicker, and the flickering ray

T. LUCRETIUS CARUS

v., 697-726.

Delays beneath the earth, and cannot rise
And so be born. In winter so it is
The nights are long and weary, till the day
Displays his radiant ensign; or again
It may be in the years alternate parts
The fires which make the sun arise and shine
At one fixed spot, now flow more slowly, now
More quickly, so that it would seem that they
Are right who say that suns are daily born.

Phases of
the moon.

The moon may shine when stricken by the rays
The sun gives forth, and every day may turn
Her light more to our sight, as she recedes
From the sun's orb; at length when she has
shone

With quite full light just opposite to him,
And rising high above has seen him set:
Then by degrees she must reverse her course,
And hide her light, the nearer that she glides
To the sun's fire, through the orbit of the signs
From the other side: as those would have it who
Picture the moon a ball, that keeps its path
Beneath the sun. 'Tis held by some again
She rolls along with light that is her own,
And shows her varied splendour forth, for yet
There well may be another body, which
Is borne aloft and glides along with her,
Ever opposing and obstructing her,
And yet not seen, because it has no light.
Or else she may revolve, just like a ball,
Half of her tinged with brightly shining light,
And as she turns may put on various forms,
Until the part, that's lighted up, she shows
Before our eyes: then by degrees twists back
And takes away the part of the round ball

ON THE NATURE OF THINGS

v., 727-752.

That sheds the light: as the Babylonian lore
Of Chaldees argues 'gainst astronomers,
And goes to prove them wrong: yet just as though
What each one fights for may not be the truth,
That you might dare accept that more than this.
Again, why a new moon should not be born
In proper form and figure every day,
Each day the first one perish, and each day
In its room and stead another be replaced,
'Tis difficult to show by reasoning,
Or yet to prove by words, so many things
In due succession are created still.
Spring goes her way, and Venus, and before*
The wingèd Zephyr, harbinger of Spring;
His mother, Flora, following their steps,
Strews all the way with colours bright, and scents
Of wondrous beauty, filling all around:
Next comes the burning heat, and with it too
Full dusty Ceres and the Etesian blasts
Blown from the North. Advances Autumn then
And with it step by step the God of Wine.
Then follow other seasons, other winds:
The loud Volturnus, and the south blast armed
With lightning. Then the shortest day brings
snow

And numbing frost, winter is here; there comes
Teeth-chattering cold. It is no wonder then
If at a certain time the moon is born
And at a certain time again destroyed,
Since in this way so many things are done.

Eclipses. The sun's eclipse, the hidings of the moon
From various causes, you may think, may spring.

* These lines are supposed to have suggested Botticelli's painting of Primavera at Florence.

v., 753-780.

Why should the moon be able to cut off
 The earth from the sun's light, to thrust her head
 Right in his way, opposing to his rays
 Her darksome orb, and yet it should be held
 Some other body without light as well
 May not the same thing do? Why can't the sun
 Wearied at certain times put out his flames,
 And then relight them when he's passed the spots
 Unfriendly to his fire, which quench his rays?
 Why should the earth, too, rob the moon in turn
 Of all its light, and keep the sun suppressed,
 Itself above, while in her monthly course
 She glides through the black darkness of earth's
 cone? *

And yet another body's not allowed
 To pass beneath the moon, or glide above
 The sun's bright orb, and intercept his rays
 And the light he pours forth. If the moon itself
 With its own brightness shine, why may not it
 Rest in a certain portion of the world
 While passing spots unfriendly to her beams?

Youth of
 the world.

As for the rest I have explained how all
 That passes in the great world's azured vault
 Can come to pass, that we might recognise
 What cause affects the courses of the sun
 The wanderings of the moon, or how they could
 Their light obstructed, die, and shroud the earth
 In unexpected dark, when so to speak
 They close their eye, and opening it again
 All places fill with clearest light; so now
 To the world's infancy I turn again,
 Earth's tender years, to show what first of all

* Cf. Milton, *Paradise Lost*, xii. 188: 'Palpable darkness.' And Exodus, x. 21: 'Darkness which may be felt.'

ON THE NATURE OF THINGS

v., 731-804.

In their new essays they resolved to raise
To the realms of light, and give the wayward
winds in charge.

Herbs came
first.

First then around the hills and plains the earth *
Gave every kind of herb and verdure bright,
The flowery meadows flashed with vivid green,
To varied trees was given the strong desire
To shoot into the air, at will unreined
In the great race on which their heart was set.
As feathers, hairs, and bristles first are born
On limbs of quadrupeds, and frame of those
That fly in air so strong, so then the earth
First put forth grass and bushes, then produced
Races of mortal beings springing up
Many in many ways, on diverse plans.
'Twas not from heaven living things fell down,
Nor those on land did issue from salt pools.
One way there is: the earth received its name
Of mother, 'cause from it all things were made.
And many living creatures now exist
Produced by showers and the sun's warm heat:
Which makes it seem less strange that then there
were

Far more and larger, when the earth was new
And ether in its prime. Then first of all
The race of fowls and varied birds that fly
Would leave their eggs when the sweet spring
arrived,
As now the cicades in summer days
Leave their smooth skins to seek their livelihood.

* Cf. Milton, *Paradise Lost*, vii. 313:

'The bare earth till then
Desert and bare unsightly, unadorned,
Brought forth the tender grass, when verdure clad
Her universal face with pleasant green.'

T. LUCRETII CARUS

v., 805-835.

Then first the earth gave birth to mortal men.
For you must know much heat and moisture still
Was in the fields, and where each fitting place
Appeared, there grew up wombs attached to earth
By roots, and when at proper time the warmth
Of infants flying moisture, seeking air,
Had opened these, there Nature turned to them
Earth's pores, compelled it from its opened veins
To pour sweet juice like milk, as nowadays
Each woman when her child is born is filled
With milk, because food's current flows
Straight to the breast. The children, too, received
From earth their food, their raiment from the
heat,

From grass a bed with gentle down o'erspread.
That infant world brought forth no chilling cold,
No burning heat, no blasts too strong to brave,
For all things grow, and gather strength alike.

Earth
mother
of all.

And so again and yet again, I say, the earth
Has won and fairly keeps a mother's name,
Since 'twas itself produced the human race,
And at a time, that's nearly fixed, sent forth
Each animal that ranges o'er the hills
At large, and birds of air of many shapes.
But then, as that there ought to be an end,
It ceased to bear, as women do from age.
Years change the nature of the world,
One state upon another state succeeds,
And nought is what it was: nothing remains,
Nature compels eternal change and flow.
For this thing rots, and feeble grows with years,
But that one comes to fame, no more contemned.
For years can change the nature of the world,
One state succeeds another, earth can't bear

ON THE NATURE OF THINGS

v., 836-866.

What once it bore, bears other things instead.*

There were
many
monsters.

And then on many portents earth essayed
Her 'prentice hand, in face and figure strange,
Man-woman, far removed from each alike,
Yet neither: things without their feet, or else
Without their hands, or dumb without a mouth,
Blind without eyes, things tightly bound in one
By firmest ties, not doing anything
Nor going anywhere, that could not ev'n
Keep out of danger, take what heed required.
And other such-like monsters it did make,
Portentous things, but all in vain her toil,
Nature forbad them to increase, nor could
They reach the flower of their age, nor feed,
Nor marry. Many things, we see, must join
Ere race can be continued; first there's food:
Then seed, and means by which it is conveyed.

Many races
perished.

†And many races then we know died out:
Could not beget, or propagate their young.
Whate'er you see that breathes the breath of life
Twas craft, or speed, or courage has preserved
From earliest days: though many too there are
Commended to us by utility,
Which still remain, entrusted to our care.
The lions fierce, the savage beasts that roam,
Their courage guards them, as speed does the stag,
And craft the fox. But wakeful dogs that watch
With faithful heart, and all the seed that is

* Cf. Tennyson, *Lucretius*:

'I saw the flaring atom-streams
And torrents of her myriad universe
Ruining along the illimitable inane
Fly on to clash together again, to make
Another and another frame of things
For ever.'

† This paragraph contains the central principle of Darwinism.

T. LUCRETIUS CARUS

v., 867-893.

Of beasts of burden, and the woolly flocks,
And horned herds, all these are given to man
To tend and care. For they have ever fled
The race of wild beasts, and have sought for peace
And food obtained without their toil, for we
Still give it in exchange for services.

But those to whom nature gave none of these,
Who could not get their food, nor give to us
Such useful service, in return for which
We'd suffer them to feed beneath our care,
All these would lie a booty and a prey,
Entrammelled in the fatal chains of fate,
Until they were destroyed by Nature's hand.

But
Centaurs
and the like
never
existed.

But centaurs never were, nor can there be
At any time things twofold in their kind,
Of double body, formed from alien limbs
So that the power and force of each can't be
Alike. This you may learn, however dull.
The horse is at his best, when three full years
Have passed, the boy is not: for even then
In sleep he'll ask to suck his mother's breast.
But when, in years advanced, the horse's strength
And limbs now weary from his ebbing life,
Begin to fail, then for the boy it is
The flower of his young life begins, and clothes
His cheeks with softest down. 'This lest you think
That centaurs can be formed, or e'en exist
From man and seed of burden-bearing horse:
Or Scyllas with their frames half-fish, and girt*

* Cf. Milton, *Paradise Lost*, ii. 651:

'She seemed a woman to the waist, and fair,
But ended foul in many a scaly fold
Voluminous and vast, a serpent armed
With mortal sting. About her middle round
A cry of hell-hounds never-ceasing barked
With wide Cerberean mouths, full loud, and rung
A hideous peal.'

ON THE NATURE OF THINGS

v., 894-919.

Around with raving dogs, and other things
Of the same sort, whose limbs we see can ne'er
Agree together: for they do not reach
Their prime together, nor attain their strength,
Nor lose it when alike advanced in age.
Nor do they love, nor are in character
The same, nor do the same things please their
sense.

Thus you may often see the bearded goats
On hemlock fatten, poisonous to man.
And then since flame is wont to scorch and burn
The tawny frames of lions, just as much
As those of flesh and blood upon the earth,
How could it be that a chimera* was,
Triple yet one, a lion in the front,
Dragon behind, and in the middle goat,
Breathing fierce flame from inwards through its
mouth?

So he who fancies when the earth was new,
And heaven just made, such living creatures were,
Resting his case on this one word of 'new,'
May babble much of such-like things, and tell
How rivers ran in floods of gold on earth,
And trees did blossom gems, and man was born
With such a strength of frame that he could
pass

On foot across wide seas, and whirl the heavens
Around him with his hands. For sure the fact
That there were many seeds on earth what time
The world bore animals, is yet no proof
That beasts of various kinds were mixed together
And members joined in one, because ev'n now

* Cf. Homer, *Iliad*, vi. 181:

'With lion's head, goat's body, and snake's tail.'

T. LUCRETIUS CARUS

v., 920-948.

We see the herbs, and corn and gladsome trees
That spring from earth, yet cannot be produced
By mixing all together. Each thing still
Proceeds in its own way, and all preserve
By Nature's settled law their different parts.

Primitive
man was
hardy.

But the human race that in the country lived
Was harder far, as fitted those whom earth,
Stern earth, produced, built up with larger bones,
More solid too, and closely knit beside
With strengthening sinews through the frame of
flesh,

Not easily affected by the cold
Or heat, strange food, or other malady.
Through many rolling lustres of the sun
They lived like wandering wild beasts. No one
then

Was e'er a sturdy guider of the plough,
Nor knew to till the fields, or plant in earth
Young trees, or in the lofty forests prune
Old branches with their knives. What sun
And showers had given, what the earth produced
Of its own will, that was enough for them,
A guerdon ample. 'Mid the acorned oaks
For the most part they led their lives, and those
Arbutus berries, which in winter days
You see now ripening in their scarlet hue,
These then the earth bore larger and far more.
Then earth's new infancy produced besides
Coarse food enough for use of wretched man.
To allay his thirst the streams and fountains
called,

As now upon the high hills a great flood
The thirsty beasts oft summons with clear call.
Then in their roamings they would often reach

ON THE NATURE OF THINGS

v., 949-972.

The well-known haunts of nymphs among the
woods,

From which they knew smooth, gliding streams
oft came

To wash with lavish flood the dripping rocks,
The dripping rocks, with green moss covered o'er,
And then burst forth and scatter o'er the plain.

Not yet they knew of fire, not yet to use
The skins of wild beasts, and to clothe their
frame

With spoils won from them; in the groves and
woods

And mountain caves they lived, and in the brush
Sheltered their squalid limbs, when forced to fly
The stormy winds and rain. The common weal

They knew nought of, nor any customs had
Or laws for general use. What fortune gave
To each, he took, skilled for himself alone

To live and flourish. In the woods love joined
Them each to each; by mutual longing linked,
Or violence and unbridled lust of man,

Or bribe of berries, acorns, or choice pears.

Relying on their wondrous strength of hand
And foot they would pursue the forest beasts
With darts of stone,* and clubs of ponderous

weight:

Many they slew, from others they escaped,
Sheltering themselves within some hiding-place:

And like the bristly swine, as sure they were,
They flung their savage limbs upon the earth

When night time came, covering with leaves and
boughs.

* These may very well be the celts and other weapons of the Stone Age.

T. LUCRETIVS CARUS

v., 973-998.

Nor with loud wailing through the fields did they*
Summon the day and sun, when roaming on
'Mid shades of night, but silent, wrapt in sleep,
Would wait until the sun with rosy torch
Brought light to the sky: for they from child-
hood's days

Were wont to see the darkness and the light
Alternate come, and could not wonder then,
Nor have misgiving, lest eternal night,
The sun's light gone, would hold the earth in fee.
Far greater was their care lest savage beasts
Would rob their miserable lives of rest.
And driven from home they oft would take their
flight

From rocky caves at sight of foaming boar
Or lion strong, and in the dead of night
All fearful leave their leafy couch to these,
Their savage guests, to occupy at will.

Nor then, much more than now, had they to leave
The pleasant light of passing life behind.
'Tis true that often one of them, when caught,
Furnished the beasts with living food, their teeth
Tearing him up, while groves and woods and hills
Re-echoed with his groans as he surveyed
His living flesh in living tomb interred.
Those who escaped half-eaten, later on,
Holding their hands above their festering sores,
With piteous cries would summon death to come
Until cruel pains had rid them of their life,
Bereft of help, unknowing how to cure.

* Mr. Duff quotes Blanco White's fine sonnet:

'Mysterious night! when our first parent knew
Thee from report divine, and heard thy name,
Did he not tremble for this lovely frame,
This glorious canopy of light and blue?'

ON THE NATURE OF THINGS

v., 999-1024.

Yet then no single day to slaughter gave
Thousands of men serving beneath the flag,
Nor did the stormy seas drive ships and men
Upon the rocks. The sea indeed would rise
And swell full often, aimless, purposeless,
With no result, and lightly fling its threats,
Its idle threats; nor could its smoothness lure
With all its winning wiles one man to death,
Laugh as its waters might. The sailors' art,
Destructive as it is, was yet unknown.
Then want of food their failing limbs did oft
Consign to death: 'tis plenty now's our bane.
Unwitting oft they poison gave themselves:
But now to others with a nicer skill.*

Civillisation
begins: fire,
clothes, &c.

Then after this they made them huts and skins
And fire: one woman married to one man,
And saw their offspring born, and man himself
Began to soften. Fire it was that made
Their chilly bodies more unfit to bear
The cold beneath the shelter of the sky:
And love impaired their force; with fond caress
Children soon learned their parents' haughty mien
To soften down. Then neighbours, too, began
To join in friendship, mutually resolved
No wrong to do to others, nor to bear
Such wrong themselves: they asked that woman-
kind

And children should be treated with respect:
While both with voice and sign in stammering
speech

They showed that pity was the due of all
The weak and feeble. And though peace could not
Be everywhere restored, yet many kept

* Read 'nunc dant aliis sollertius ipsum.'

T. LUCRETII CARUS

v., 1025-1057.

Their pledges in good faith; were't not for this
The race had altogether perished then,
Nor could the breed have lasted till to-day.

Language.

III
1
2
 Nature then bid them utter various sounds
 And use expressed the names of things: just as
 The inability to speak oft seems
 To urge a child to gestures, when it points
 With finger at the various things it sees:
 Each feels how far his own power can be used.
 Before the calf has horns upon his head
 He butts with it when angry, and in rage
 He tries to strike. The panthers' cubs, the whelps
 Of lions, fight with claws and feet and mouth
 Ere teeth and claws are there. The race of birds
 We see still trust their wings, and trembling seek
 The succour of their pinions. So to think
 That any one distributed the names
 To things, that so men learned their earliest words,
 Is folly. How should one avail to note
 The names of all things, with appropriate words,
 And others fail to do so? And besides
 If others had not used such words themselves,
 Whence did he get the sense to use them so,
 And whence the power to know what he would do,
 And see it in his mind? Again, one man
 Could not force many, and subdue them all,
 To wish to learn his names of things. It is
 No easy thing to teach the deaf what they
 Must do, nor yet persuade them: they would not
 Suffer, nor yet on any pretext bear
 Strange sounds of voice to intrude upon their ear,
 And all in vain. And after all is said,
 What wonder if the race, in whom both voice
 And tongue were found in vigour, noted down

ON THE NATURE OF THINGS

v., 1058-1085.

The various words expressing different things
According to the sense? Ev'n the dumb herds
And wild beasts too are wont to give forth sounds
Distinct and various, when they grieve, or fear,
Or else rejoice. 'Tis easy to show this.

When first the lips of the Molossian dogs
So large and soft, begin to growl and show
Their savage teeth, far different is the sound
Of muttered rage with which they threaten then
Than when they bark, and fill the place with noise.
Again, when they attempt to lick their whelps
With gentle tongue, or toss them with their feet,
And snapping at them, with their teeth held back,
Make feint to bite, though gently, then they use
In fondling them a growling sort of sound,
Quite different to the bay they make when left
Alone within the house, or whining sink
With body doubled up, to avoid a blow.

The horse's neigh is quite a different thing
When a young stallion, stricken by the spurs
Of wingèd love, rages among the mares,
And when with nostrils open for the fight
He snorts the battle signal, or perchance
When at some other time with shaking limbs
Neighs gently? Last, the race of fowls and birds
Of various kinds, hawks, ospreys, gulls, who seek
Amid the salt sea waves their food, they make
At one time noises vastly differing,
From those they use when fighting for their food
And struggling with their prey. And some of
them

Change with the weather their hoarse, croaking
sound,

As do the long-lived rooks, and flocks of crows,

T. LUCRETIUS CARUS

v., 1086-1111.

When they are said to invite the rain and showers,
And sometimes call for winds and gales. And so
If various senses call on animals,
Although they're dumb, to utter varied sounds,
How much more likely man himself could note
Dissimilar things by widely different words.

Fire. And lest on this you silently inquire:

'Twas lightning that first brought down fire to
man,

And from it all the heat of flame is spread,
For oft we see things struck with heaven-sent
flames

Grow bright, when heaven's stroke its heat con-
veys.

Aye, and sometimes whene'er a branching tree
Driven by the winds sways to and fro, and leans
Upon another's branches, thus being rubbed,
Fire is struck out, and glowing heat is seen,
While boughs and stems are rubbed against each
other.

Now either of these things may have produced
The fire for man. And then the sun did teach
Them how to cook their food and soften it
With the heat of flame, since much they saw grow
soft

With influence of its rays throughout the fields.

Further
advance:
kings, cities.
&c.

And more and more each day those who excelled
In intellect and judgment taught to men

To change their former life for newer ways.

Then kings built towns, and set a citadel,

A stronghold and a refuge for themselves.

They made division of their herds and fields:

And gave to each according to good looks,

Or strength, or intellect: good looks were prized

ON THE NATURE OF THINGS

v., 1112-1134.

And strength was valued then. And wealth was
next

Discovered, gold was found, which soon, alas!
Robbed strong and fair alike of their good name,
For sure though men be brave and fair to see
They follow still the train of richer men.
Yet if a man would guide his ways aright,
'Tis in itself great wealth, contentedly
To live a frugal life,* you'll always have
A crust, and never altogether lack.
But men still longed to be distinguished, great,
Their fortune on a firm foundation fixed,
And crowned with wealth to lead a quiet life:
In vain the longing, in the fight for fame
Their path was full of danger: from the top
Has envy, like a bolt, oft cast them down
Contemptuously to foulest depths of hell:
For envy like a thunderbolt still strikes
The summit, and things raised above the rest:
So better far it is in peace to live
A subject, than to rule imperially
And sit upon a throne. So then let men
Still weary to no purpose, sweat with blood,
Fighting along ambition's narrow road,
Since all they know comes from another's mouth
They seek for what from others they have heard,

* Cf. Cicero, 'Magnum vectigal est parsimonia;' and cf. Ben Jonson, *Every Man out of Humour*:

'I see how plenty surfeits oft,
And hasty climbers oft do fall:
I see how those that sit aloft
Mishap does threaten most of all.
Some have too much yet still they crave,
I little have yet seek no more;
They are but poor though much they have,
And I am rich with little store.'

T. LUCRETIUS CARUS

v., 1135-1150.

Not what their own sense prompts, and this be
sure

Is and remains as useless as it was.

Kings
overthrown
—anarchy.

Then came the slaughter of the kings: Low lay*

In dust the ancient majesty of thrones,

Their sceptres proud: the splendid signs

Of the sovereign's head all bloody on the ground

Amid the people's feet, its honours mourned;

Too greedily insulted, where it once

Was too much feared. Then power fell in the
hands

Of the very dregs, the ungovernable mob,

And each man sought a kingdom for himself

And wished to rule. Then some one taught to
choose

Fit magistrates, and codes to frame, to be

Their laws: for man worn out with weary years

Of force was growing sick of all the strife

Thus stirred: and all the more was glad to live

Beneath the sway of laws and stringent rules.

As each one moved by anger set himself

To be his own avenger,† more than now

Just laws permit, so then men tired to live

* Cf. Shirley, *Dirge*:

'Sceptre and crown

Must tumble down

And in the dust be equal made

With the poor crooked scythe and spade.'

† Cf. Hesiod, *Works and Days*, 265: 'He does mischief to himself who does mischief to another, and evil planned harms the plotters most.'

Cf. Ps. ix. 15: 'The nations have sunk into the pit they have digged: in the snare they have laid; have their own feet been entangled.'

Cf. too, Milton, *Paradise Lost*, vii. 171:

'Revenge, tho' sweet at first,
tter ere long back on itself recoils.'

ON THE NATURE OF THINGS

v., 1151-1175.

A life where brute force reigned. And so it is
The dread of punishment oft spoils the prize
That man can win. For force and doing wrong
Still catch the doers of them in their net,
And ev'n like curses still come home to roost;
Nor is it easy for one's life to be
Tranquil, composed, if by one's deeds one breaks
The laws made in the interest of peace:
Ev'n if one hides it both from Gods and men,
One must not always think to keep it hid,
For many often talking in their dreams,
Or else in sickness raving, have been known
To drag to light of day crimes hidden long.

Origin of
belief in
Gods.

Now ask what is the cause has spread so wide
Through mighty States the worship of the Gods,
And filled our towns with altars, and arranged
That sacred services be still performed
Such as are rife in many places now*
On great occasions, whence there comes to men
That dread which raises temples to our Gods
O'er all the earth, and forces them to crowd
Their shrines on holidays; it is not hard
To give fit answer. Even then men saw
With mind awake the glorious forms of Gods,
Which were in sleep increased to wondrous size:
These they endow with sense, they see them move
Their limbs, and utter lofty things that fit
Their splendid forms and mighty powers. They
give

Them life eternal, for they ever saw

* Martha thinks these lines refer to the new cults introduced into Rome, such as those of Cybele, mentioned in Book I., and Mithras, the Sun-god, transmitted to Rome during the first century —of which there are so many traces on the Roman altars in this country.

T. LUCRETIUS CARUS

v., 1176-1202.

Their presence near, always in form the same,
And also that they could not think that those
Of such exalted power could ever be
O'ercome by any force. They thought they were
O'er us in fortune too pre-eminent:
No fear of death had they, and ev'n in sleep
Strange and portentous things they could effect,
Yet feel no toil. They saw the seasons come,
The cause they could not tell; as last resource
They handed over all things to the Gods,
And made all things to bow beneath their rod.
In heaven they placed the Gods' abodes and
shrines,

Because through heaven roll the sun and moon,
Moon, day, and night, night and its solemn stars,*
The ever-wandering meteors of the sky,
The flying flames, clouds, sun, and rain and snow,
Winds, lightnings, hail, the rapid rumbling roar,
The mighty murmurings of the threatening storm.

What
misery this
belief has
caused.

Unhappy race of men, who gave such deeds
To Gods to do, and gave to them as well
Such bitter wrath, what lamentations loud
For their own selves they made, what wounds
for us,

What tears for those who follow! 'Tis no act
Of piety to turn to stocks and stones
With covered head,† and every shrine approach,
Fall prostrate on the ground, and spread your
hands

Before the temples of the Gods, and there
Dye altars red with blood of many beasts,

* 'Luna, dies, et nox, et noctis signa severa,' said by Mr. Mackail to be the finest line in Latin verse.

† The Romans sacrificed with covered head; the Greeks, on the other hand, with uncovered.

ON THE NATURE OF THINGS

v., 1203-1222.

Add prayer to prayer; far better sure it were
To gaze on all things with a tranquil mind.
When we look up to the celestial vault,
To ether fixed above with glittering stars,
When comes to mind the course of sun and moon,
Then to our breast oppressed with other ills
That other care begins to raise its head,
With wakened force, the care that it may be,
This power of the Gods no limit has,
Which whirls the bright stars in their various
course.

For lack of reasoning turns the mind to doubts,
Whether there was a birthtime of the world,
Or e'er will be an end; how far again
The ramparts of the world can bear the strain
Of restless motion, or endowed by Gods
With everlasting strength they still will glide
Right through a never-ending tract of time,
Defy the force of innumerable years.
Whose mind shrinks not before the fear of God,
Whose frame is there that covers not with dread,
When the baked earth rocks with the dreadful
stroke

Of lightning, and loud rumblings fill the sky?
Do not the people and the nations quake,*

* Cf. Shakespeare, *King Lear*, iii. 2, 54.

'Let the great gods,
That keep this dreadful pother o'er our heads,
Find out their enemies now. Tremble, thou wretch,
That hast within thee undivulged crimes,
Unwhipp'd of justice: Hide, thou bloody hand;
Thou perjur'd, and thou simular of virtue
Thou art incestuous! Catiff, shake to pieces
That under covert and convenient seeming
Hast practis'd on man's life . . . and ask
These dreadful summoners grace.'

And *Juvenal*, xiii. 223.

T. LUCRETIUS CARUS

v., 1223-1252.

And haughty kings shrink stricken with the fear
 Of God, lest some foul crime or haughty word
 Has reached its time, to pay its penalty?
 Or when strong force with violence of the storm
 Sweeps o'er the sea the captain of a fleet
 With his strong legions and his elephants,
 Does he not seek the favour of the Gods
 With vows, and trembling ask in prayer to have
 The winds abated and more favouring gales?
 But all in vain: seized by the tempest fierce
 He's carried none the less to the shoals of death
 So greatly does some hidden power condemn
 Our human fortunes, and is often seen
 To trample down and make a laughing-stock
 Of all the symbols of imperial power.
 Again, when earth all rocks beneath their feet,
 And cities ruined fall, or tottering stand,
 Uncertain what to do in such dire case,
 What wonder mortal men abase themselves
 And leave in things of earth the mighty powers
 And wondrous strength of Gods to govern all?

Metals
discovered.

Then copper next, and gold and iron were found,
 The weight of silver, and the use of lead,
 When fire had burned up mighty woods upon
 The lofty mountains, as by lightning's stroke,
 Or else in forest war among themselves
 Men on their foes cast fire to frighten them,
 Or that led on by the goodness of the soil
 They wished to open out rich fields, and bring
 The land to pasture, or to slay wild beasts
 And grow rich on the prey. To hunt with pit
 And fire was used before they did enclose
 The glade with nets, or rouse it with their dogs.
 Whate'er the fact, and from whatever cause,

ON THE NATURE OF THINGS

v., 1253-1275.

The scorching heat had eaten up the woods
With dreadful crackling from their lowest roots,
And burned the ground with fire, there trickled
down

From boiling veins of ore to the hollow spots
A stream of gold and silver, copper, lead;*
Which, when they saw them hardened on the
ground,

And highly shining, they would lift them up,
Attracted by their bright and polished hue,
And see their figure was the same in form
As the outlines of the holes where they had lain.
Then came the thought that these might melted be
To any form they liked, or any shape,
And might by hammering out be brought by them
To sharp, fine points, as weapons to their hands,
That they might fell the woods, and hew the logs,
And plane the planks, and drill, and pierce, and
bore.

These things at first with silver and with gold,
No less than with the copper's solid strength,
They set about in vain, their power gave way,
They could not, like the latter, stand the strain.
Copper was more esteemed, and gold would lie
Unheeded, useless with its blunted edge.
Now copper's down, and gold is at the top.

* Cf. Milton, *Paradise Lost*, 565.

'two massy clods of iron and brass
Had melted; whether found where casual fire
Had wasted woods on mountain, or in vale
Down to the veins of earth, thence gliding hot
To some cave's mouth, or whether washed by stream
From underground; the liquid ore he drained
Into fit moulds prepared; from which he formed
First his own tools; then what might else be wrought,
Fused, or graved in metal.'

T. LUCRETII CARUS

v., 1276-1303.

So rolling years can change the face of things.
What was of value counts for little now;
Another takes its place, contemned no more,
Is sought for daily, and when found is placed
In high repute, and honoured among men.

Iron and
bronze.

Now, Memmius, you can easily know yourself
How iron and its qualities were found.

Our ancient weapons were hands, claws, and teeth,
And stones, and branches from the woods, and
flame

And fire, when first discovered. Later on
There came the power of iron, and copper which
Preceded iron, as being more easily worked
And more abundant. Copper 'twas with which
They worked the soil, with copper stirred the
waves

Of war, inflicting gaping wounds, laid hold
Of land and cattle; for to them thus armed
Things naked and defenceless soon gave way.
Then by degrees came forth the iron sword,
And the bronze sickle was in disrepute,
And iron alone was used to till the soil,
And war's uncertain fights were rendered fair.
And earlier too the custom was when armed
To mount a horse, and guide him by the reins,
With right hand fighting, than in two-horsed cars
To meet the shocks of war; and such a car
Is older than the four-horse, and the car
That's armed with scythes. The Carthaginians
First taught Lucanian cattle* towering high,
Hideous to see, with snakes instead of hands,

* The elephant was termed 'bos Lucas,' because the Romans first saw the elephant in Lucania, in S. Italy, during the war with Pyrrhus, 280 B.C.

ON THE NATURE OF THINGS

v., 1304-1331.

The wounds of war to suffer and the ranks
Of Mars disorder. So sad discord formed
One thing upon another, to affright
The world in arms, and every day that passed
But added to the horrors of stern war.

Animals in
warfare.

Bulls, too, were tried in fight, and savage boars
Let loose against the foe. Some sent before
Strong lions with armed trainers, and a host
Of savage keepers, who could guide their course
And hold them fast in chains: in vain, since they
Amid the *melée* warming, in their rage
Made no distinctions, shaking high their heads
With terror-striking crests on every side:
Nor could the horsemen soothe their frightened
steeds,

And turn them 'gainst the foe. Then with a spring
The lionesses threw their angry limbs
In all directions, sometimes sought the face
Of their opponents, sometimes tore the back
Of the unwary foe, and twining round
Would dash to earth the wounded, clinging on
With savage bite and hooked claws. The bulls
Would toss their friends, and tear them with
their feet,

Gore with their horns the bellies and the sides
Of the horses underneath, the earth upturn
With threatening front. The boars, too, would
rend

Those on their side with savage tusks, and dye
With their own blood the weapons broke in them,
The very weapons broken in their sides,
And put to flight the horse and foot alike.
The horses turning sideways tried to escape
The push of cruel tusk, or rearing up

T. LUCRETIUS CARUS

v., 1332-1363.

Pawed with their feet the air, but all in vain,
You saw them fall with all their tendons cut,
And heavy sink upon the stricken earth.
Those whom they thought that they had trained
enough

At home, they saw in the middle of the fight,
Grown wild 'mid wounds and shouts and fright and
noise;

They could not bring them back; and every kind
Of beast flew all around; just as do now
Lucanian beasts, when wounded by the steel,
Though first inflicting many savage deaths
Upon their friends. All this I think they did
Not so much with the hope of victory,
As to inflict great grief upon the foe,
Ev'n at the cost of their own lives, because
Their ranks were few, and that they wanted arms.

Clothes
sewn first,
then woven.

A garment sewed together came in use
Before a woven one. For that you need
The use of iron: by which they fashion looms,
Nor otherwise can things so fine be made,
As leash-rods, spindles, shuttles, and yarn-beams,
Still ringing as they go. And nature made
Men work the wool e'er womankind begun
To do so: for the man is far ahead
In skill, and far more clever, till the day
When the rough country folk upbraided them
To such degree that they were glad to hand
It over to the women, and to bear
An equal share of toil, and with hard work
Make hard their bodies and their hands as well.

Sowing and
grafting.

Nature herself, the world's artificer,
First showed them how to sow, and how to graft,
Since berries and the acorns from the trees

ON THE NATURE OF THINGS

v., 1364-1392.

In proper time gave nurseries of shoots;
Whence came the notion of inserting grafts
Into the trees, and planting in the ground
New saplings. Next they tried for their loved farm
One culture or another, and would see
The land improve the wild fruit growing there
By management and kindly care. And then
They every day compelled the woods to climb
Higher and higher up the mountain-sides,
And leave the ground below for plough, that they
Might have upon the lower hills and plains
Meadows and pools and streams, and fields of corn
And gladsome vineyards, and allow a strip
Of grey-green olive-trees to mark the line,
Far spreading over hills and plains and dales;
Just as you see to-day the land is marked
By varied beauties, where they plant with rows
Of goodly fruit trees, and still keep it fenced
All round with fruitful shrubs of varied kinds.

Music.

To imitate the liquid notes of birds
Was long in use before men learned to sing
In melody sweet songs, and please the ear.
The whistling of the zephyr through the reeds
First taught the country people how to blow
In hollow stalks. Then by degrees they learned
Sweet, plaintive songs, such as the pipe pours forth
When pressed by player's fingers, heard through
woods
And brakes and pathless groves, through desert
haunts,
And scenery of godlike calm. These soothed their
minds
When their repast was o'er: such things are sweet
At such a time. And often so reclined

T. LUCRETIUS CARUS

v., 1393-1421.

On the soft grass beside a running stream,
Under the branches of some lofty tree,
At small expense they led their happy lives,
Most when the seasons smiled, and summer days
Painted the green grass with abundant flowers.
Then jokes, and talk, and pleasant laughter came:
It was the rustic muse's day: glad mirth
Prompted to bind with woven wreaths of flowers
And leaves the head and shoulders, and to move
Their limbs but stiffly and not yet in tune,
And strike their mother earth with clumsy foot:
Whence came more laughter and more pleasant
smiles;

For all was new and strange and full of life.
The wakeful found a solace for the sleep
That they had lost in drawing out new tones
In various ways, trying the different tunes,
And running o'er the reeds with curving lip.
Whence even now our watchmen in the towns
Keep these traditions still, and now have learned
To keep in tune, and yet do not enjoy
It more than did of yore the rustic group
Of that old earth-born race. For what we have,
Unless we've something known more sweet before,
Pleases us still, and seems to be the best;
While better things, which later come to us,
Are apt to spoil our taste and love for those
Which went before. And so they learned to hate
Their acorn food, they left behind their couch
With leaves and grasses strewn, the vest of skin
Was laid aside, although I well believe
Such envy once there was that he who wore
It first was done to death by treachery;
'Twas torn among them, covered with their blood,

ON THE NATURE OF THINGS

v., 1422-1448.

And thus destroyed was of no further use.
Then it was skins, now gold and purple fill
Our minds with care, and weary them with war.
'Tis our own fault, I think: 'tis true the cold
Was torture to the naked frame of man
In those old days without their skins: but us
It harms not now to lack a purple robe,
Brocaded silk with figures and with gold,*
If we but have an ordinary garb
To cover us from cold. Man toils in vain,
In idle cares consumes his fleeting years,
Because he does not know what is the end
Of getting, nor how far true pleasure can
Continue to increase; 'tis this be sure
That step by step has sent our life to lose
Its way upon the sea, and from the depths
Has stirred the mighty bellowings of war.
Yet still these watchful guardians of the world,
The sun and moon untiring in their course,
Shedding their light round yon revolving vault
Have taught us that the seasons still come round,
That things proceed by plan and fixed law.

Walled
towns:
Sciences
and arts.

Already fenced in castles strong men passed
Their lives, and tilled the land divided out
And marked with bounds: the sea was all alive
With sail-directed ships; on treaties based
Cities had helpers and allies to aid;
Poets began to sing heroic feats,
Nor much before were letters first found out.
And therefore 'tis our age cannot look back
To what was done before, save only where
Reason can show some trace of what has been.
So ships and fields in tillage, walls and laws,

* Virgil, *Æneid*, xi. 72, has 'Vestes auroque ostroque rigentes.'

v., 1449-1457.

Arms, roads, and dress, and many things beside,
 And all the prizes, all the sweets of life,
 From top to bottom, songs and pictures too,
 And wondrous statues carved, all these did use
 And the experience of the active mind
 Teach men by slow degrees, and step by step,
 As they advanced. So years bring everything
 Before men's minds: then reason raises them
 Into the light of day. For things must grow
 One on another clearer and more bright
 In arts, until they've reached their topmost height.

ON THE NATURE OF THINGS

BOOK VI.

vi., 1-17.

Athens,
where
Epicurus
was born.
His great
work.

'T WAS Athens first, Athens of famous name
First gave to suffering men the crops of
grain,

And cheered anew their days, passed laws and gave
Them first the pleasant solaces of life:

Yes, first when she produced a man so large
In heart, who long ago from his wise mouth
Poured forth all knowledge, and whose glory now,
Though dead and gone, for all the truths divine
He found, is spread and reaches to the sky.
For when he saw that all that use demands
For food of man had been already made,
That life as far as possible was safe,
That men in riches, honour, praise were strong,
And raised aloft in sight of all mankind
By their children's high repute, and yet they had
Each one of them an anxious heart at home,
And against their will were vexed unceasingly,
And forced to anger with disturbing plaints,
He saw it was the Vase* itself, which is

* The metaphor of the vase and bowl are familiar to us in Omar Khayyām and Browning's 'Rabbi Ben Ezra.' The latter says:

'So take and use Thy work!

Amend what flaws may lurk,

What strain o' the stuff, what warpings past the aim?

My times be in Thy hand!

Perfect the cup as planned!

Let age approve of youth, and death complete the same!'

Cf. too Horace, *Epistles*, I. ii. 54: 'Sincerum est nisi vas, quodcumque infundis acescit.'

Cf. Mark, vii. 20: 'That which cometh out of the man that defileth the man.'

vi., 18-42.

Our body's tabernacle, wrought the ills,
 By its corruption all things were defiled
 That came in from without, however fair
 They were: and partly that he saw it full
 Of holes, and leaky, as could not be filled,
 And partly that he saw it did befoul
 With nauseous flavour all that it received.
 And so with words of truth he cleansed their
 hearts,

And put an end to lust and fearsomeness,
 And set on high what was the greatest good
 That all should aim at, and he showed the way,
 The narrow way,* in which, by walking straight
 It could be reached, and pointed out to man
 The evil that there was on every side
 In life, existing, ever flying round,
 By chance or force, to nature's influence due,
 And from what portals each must sally forth
 To meet the foe: and proved 'twas their own fault,
 Sad waves of troubles tossed within the breast.
 As children tremble and are full of dread
 At all things in the darkness,† so do we
 Fear in the light, sometimes at things which are
 Objects of fear no more than those which they
 Dread in the dark, and fancy they will come.
 Such dread, such darkness of the mind the sun
 With all its rays, the brightening shafts of day
 Cannot disperse; nature and nature's law
 Alone can do it; therefore I proceed
 The web of my discourse again to weave.

* We cannot forget here Matt. vii. 14: 'Strait is the gate, and narrow is the way, which leadeth unto life, and few there be that find it.'

† Bacon, in his Essay on Death, says: 'Men fear death, as children fear to go in the dark.'

ON THE NATURE OF THINGS

vi., 43-68.

Phenomena
of the sky:
not the work
of the Gods.

And since I've shown the world's orb itself
Is mortal, and that heaven had a birth,
And all that goes on in it, or must go,
Have to a large extent explained, now learn
What follows on. Since once for all I mount
The Muse's glorious car* (to explain the law
Of winds and storms, which men oft say are due
To the Gods above, who in their anger raise
The tempest's force, and when there comes a lull
In the fury) of the winds, say they're appeased,
And that, their anger gone, the omens too
Are changed; and for the rest I will explain
What mortals see go on in heaven and earth,
With fearful minds all hanging in suspense,
Trembling before the Gods in fear, depressed
To very earth, and all this just because
Their ignorance of causes forces them
To hand things to the Empire of the Gods,
And give to them the world's sovereignty.
For they who've rightly learned the Gods still
lead

A life of ease, if they should wonder still,
On what plan each event is carried on,
And most in those things which are seen above
In the ethereal realms, are backward borne
To old religious scruples, take to themselves
Taskmasters hard, whom they believe, poor things,
Can all things do, not knowing what can be
Or what cannot, or on what plan is given
Set power to each, and bounds they cannot pass;
And so by blinded reason still are led
Yet further from the truth. Such things unless
You loathe, and in your mind refuse to think

* The lines in brackets are supplied by Munro.

T. LUCRETII CARUS

vi., 69-96.

Unworthy thoughts of these high deities *
 And alien to their peace, they often will
 Thus slighted by you, do you some mischance ;
 Not that the high power of the Gods can be
 So outraged as in wrath to seek revenge,
 But you will think yourself that they, although
 They lead this quiet life, are rolling still
 Great angry billows, and will not approach
 With tranquil breast their shrines, nor able be
 To have communion with those images
 Which, from their sacred body make their way
 Into the minds of men, to tell their power,
 And so will miss the sweet tranquillity
 Which such communion gives. Thus you may see
 What life will follow. Be it far from us,
 As I by reasoning show, and yet although
 I've many things advanced, much still remains
 To be adorned with polished verse. There is
 The law of heaven and its form to grasp,
 Storms and bright lightnings to be sung, what they
 Can do and whence are borne, lest hastily
 In folly you divide the sky in parts,
 To see from which the volant fire has come,
 Or whither gone, or how it made its way
 Within our walls, and thence, the mastery won,
 Escaped again. Do thou, Calliope,
 Deft muse, of men the solace, joy of Gods,
 Point out the road before me as I run
 To the white limits of the final goal,
 That, thee my leader, I may win the prize.

First, thunder shakes the heaven's blue vaults,
 because

Thunder :
 several ways
 in which
 it arises.

* This passage contains the fullest view of the Epicurean idea of the relations of the Gods to man.

ON THE NATURE OF THINGS

vi., 97-126.

The ethereal clouds that fly on high still meet
Opposing winds and clash; no sound e'er comes
From cloudless skies, but where the clouds are set
In denser masses, there the noise is heard
With louder murmur. Now clouds cannot be
So dense as stones and logs, nor yet so thin
As mists and fleeting smoke, for either they
Would fall with their dead weight like stones, or
else

Would be unable to arrange themselves
Like smoke, and could not hold the frozen snow
Or showers of hail. They also give a sound
O'er the wide levels of the spreading world,
As does sometimes a canvas stretched above
Our theatre's wide space, when tossed about
Between the poles and beams; sometimes when
rent

By boisterous gales it howls, and imitates
The crackling sound of paper. This noise, too,
You may observe in thunder, when the winds
Whirl with their blasts a garment hung to dry,
Or flying bits of paper. Sometimes, too,
Clouds cannot meet with front to front, but move
Flanking with varied motions, grazing thus
Their bodies as they pass, whence issues forth
A harsh dry sound which grates upon the ears,
Continuing till they reach a clearer space.
And so in thunder all things feel the shock,
And often tremble, and the mighty walls
Of the wide-stretching firmament appear
To have leaped asunder at the blow, when oft
A rushing, stormy wind has risen up
Quite suddenly and mingled with the clouds,
And, shut up there, does more and more compel

The cloud to take a hollow form, with crust
 All thickened round; then when its fierce attack
 And force has split it, there ensues a crash
 Of dreadful cracking noise; no wonder, when
 A little bladder full of wind emits
 A mighty sound, if suddenly it's burst.

There is another cause why winds are heard
 When blowing through the clouds. We often see
 Rough branching clouds borne on in many ways;
 'Tis just as when the north-west wind blows strong
 Through a thick wood, the leaves and branches
 give

A rustling sound. It sometimes happens, too,
 A strong wind rising cuts the cloud in two
 With a direct attack. What such a blast
 Can do you clearly see when even here
 On earth, where it is gentler, it can twist
 And tear tall trees up from their deepest roots.
 There are, too, waves in clouds, which, when they
 break,

Are heard to roar, as happens in wide streams
 And the great sea, when surf breaks on the shore.
 And sometimes, when there falls with burning
 force

The thunder-bolt from cloud to cloud, if chance
 The cloud is full of moisture, then at once
 It drowns it with loud noise, as glowing iron
 From the fiery furnace hisses when it's plunged
 In water icy cold. But if the cloud
 Is drier, then it lights and burns at once
 With hollow roar; as when on mountain-side,
 With laurels clad, a fire driven on by wind
 Ranges around, consuming them with its blast,
 (And nothing burns in crackling flame more swift

ON THE NATURE OF THINGS

vi., 154-183.

With louder noise than Phœbus' Delphic tree.)
And lastly, oft the crashing of the ice,
The fall of hail is heard among the clouds:
For when they're closely packed together in
A narrow space by winds, the frozen clouds,
Towering like mountains, mixed with hail, break
up.

Lightning,
and its
various
causes.

It lightens, too, when in their course the clouds
Have struck out many seeds of fire: as when
Stone strikes on stone, or iron: for then, too,
The light bursts out, and scatters sparks of fire.
Our ears can hear the thunder's roar before
Our eyes can see the flash, because things come
More slowly to the ears than those which touch
Our sight. That you may learn from this as well:
If you should watch one felling a large tree
With axe of double edge, you see the stroke
Before its sound can reach the ear: and so
We see the lightning ere the thunder comes,
Yet both discharged together from one cause,
Produced together by the self-same shock.

Thus too we may explain why clouds can tinge
The earth with wingèd light, and why the storm
Can flash with quivering stroke. For when the
wind

Is mixed up with the cloud, and there has made,
As I have shown, a thickened crust around,
It heats by motion, as do all things else;
A leaden ball in motion, if prolonged,
Will melt. So when this burning wind has rent
The darksome cloud, it scatters sparks of fire,
As 't were by force discharged, and these produce
Quick-glancing shoots of flame: then comes the
sound

More slowly to our ears than the things which
strike

Our vision, to our eyes. This you must know
Takes place when clouds are dense and piled up
high

One upon other in a mighty throng;
Lest you should be misled, by seeing here
How broad they are below, and have not marked
How high they are built up. And just observe
How when winds carry clouds as high as hills
Across the air, or when you see them piled
One upon other on the mountain-side,
And resting in their place, the winds being dead,
Press down from up above, you then can see
Their mighty mass, like caves of hanging rocks,
And when the winds have filled them 'mid the
storm,

They fume and fret with mighty murmur, shout
Within the clouds, and gnarl like beasts in dens!
Now here, now there, is heard throughout the
clouds

Their roaring, as they seek to find escape,
Roll sparks of fire from the surrounding clouds,
Force them together, make the flames fly round
The furnaces within, until, the cloud being burst,
They flash all round, with coruscating flames.

Hence too it comes that there flies down to
earth

Yon clear, bright golden-coloured fire so swift:
The clouds themselves have many seeds of fire,
For when devoid of moisture they are oft
Of colour bright as flame. They must receive
Them from the sun as well, so bright they shine,
Such fires they shed. When then the driving wind

ON THE NATURE OF THINGS

vi., 212-242.

Has pushed and packed them in a single mass,
Urging them on, they pour their seeds abroad
Which give the rosy colour to the flames.
It lightens, too, when clouds are rare and thin.
For when the wind dissolves them as they go
And breaks them up, these seeds must fall perforce
Which form the lightning, but it lightens then
Noiseless, without alarm, with no uproar.

Thunder-
bolts.

And further of what nature thunderbolts
Are formed, their strokes declare, the traces of
Their heat burnt into things they strike, the marks
That scent the air with sulphur; these are signs
Of fire, and not of wind or rain. Besides
They often set on fire the very roofs
Of houses: buildings, too, can feel the power
Of their swift flame. This fire doth Nature make
More subtle than all other fires of things
Minute and easily moved, which nought can stop.
The mighty thunderbolt can pass through walls:
Just like a cry or voice, it passes through
The rocks, the brass, and in a moment melts
Both gold and brass. Wine, too, can disappear;
The vessels still untouched, because its heat
Loosens all round, makes thin the earthenware,
And penetrating swiftly brings to nought
The wine's first atoms. This the sun's great heat,
Though ever beating with its glittering fire,
Through years cannot effect: so much more swift,
So far more overpowering is the bolt.

Their
power and
action.

And in what way they're made, and how they
come
With such a rush, that they can break up towers,
Wreck houses, tear the beams and rafters up,
Cast down and burn the monuments of men,

vi., 243-273.

Kill men themselves, and strike their cattle dead
The country round, all these and other things
I will explain, and not make more excuse.

Bolts, then, we must suppose are made of clouds,
Thick, piled up high: for none are ever seen
When skies are clear, or clouds are somewhat thin,
And this is shown quite clearly: at such time
Clouds grow so thickly over all the sky,
That we might fancy all its darkness deep
Had fled from Acheron, and had filled instead
The heavens' great vaults: so much amid the night,
The fearful night of storm-clouds gathering up,
Do faces of black horror hang on high:
When that the storm begins to launch its bolts.
Very often, too, black storm-clouds out at sea,
Let down like streams of pitch from heaven, fall
Upon the waves with darkness charged, and draw
With them dark tempest full of storms and bolts,
Itself already filled with fires and winds,
That ev'n on land men quake, and seek to hide.
Thus then we must suppose the storm above
Reaches high up: the clouds could never hide
Earth in such darkness, unless from above
They were built up in numbers infinite,
The sun meanwhile withdrawn: nor could they
drown
The earth with such a rain, that streams o'erflow,
And plains are covered, if the ether were
Not piled with clouds on high. In this case then
All things are filled with winds and fires, and so
Thunder and lightning roll on every side.
I have already shown that hollow clouds
Have many seeds of heat, and many more
Get from the sun's rays and their glowing warmth.

ON THE NATURE OF THINGS

vi., 274-303.

And when the wind has forced them to one place,
And shed forth many seeds of heat, and mixed
Itself up with that fire as well, then straight
An eddy of the wind is introduced
And whirls about in little space, and so
Sharpens the bolt in furnaces within;
Its heat is from a double source: for first
The motion makes it hot, and then it takes
Heat from contagious fires. Then when the wind
Is heated, and the fire at length has made
Its fierce attack, the thunderbolt matured
Splits up the cloud quite suddenly, the heat
Aroused is borne along, flooding the whole
With coruscating light. Then comes the noise
So loud it seems to crush down heaven's vaults
Which part asunder: through the earth is felt
A heavy trembling, rumblings run throughout
The sky above, for the whole storm at once
Quakes with the shock, and roarings everywhere
Are heard. And on the shock there follows rain,
So full and heavy, that vast ether seems
As turned to water to be tumbling down
For another deluge: such a flood is poured
From the burst cloud, and violence of the wind.
Sometimes it happens that the force of wind
Blown from without falls on a cloud that burns
With bolt that's fully forged; and when it's burst
There falls that fiery whirl our country's speech
Has termed a thunderbolt. The same may chance
Towards other parts according to the wind.
And sometimes, too, wind blowing without fire,
May get on fire, when travelling far: and while
It passes, losing in its onward course
Some heavy bodies, which cannot pass through;

vi., 304-334.

It gathers others from the air itself
 And carries them along, which, being small,
 Mix with it, and in motion get on fire:
 Just as a leaden ball will oft become
 Heated by motion, lose its colder parts,
 Taking fire from the air. Sometimes the force
 Of the blow itself strikes fire, ev'n when the wind
 Which struck it is devoid of heat itself:
 It is I think because, when struck with force,
 The elements of heat can gather up
 Out of the wind itself, and what it struck.
 We strike a stone with iron, there is fire:
 And none the less, because the iron is cold,
 Do its bright seeds of heat assemble still
 When it is struck. And so it is, a bolt
 Can set on fire whatever comes its way,
 That's fit to burn. And yet the force of wind
 Must not be thought to be absolutely cold,
 Which is with so great strength sent from above,
 Since if it be not lighted on its way,
 Yet it arrives well warmed and mixed with heat.

Their
 velocity.

The swiftness of the bolt, its heavy blow,
 The great rapidity with which it falls,
 It due to this, that first its natural force,
 Collected in the clouds, makes strong attempt
 To escape, which onrush when the clouds cannot
 Endure, the force is driven out, and flies
 With a strange violence, as from engines strong
 Missiles are hurled. Remember, too, it's formed
 Of bodies small and light, not easily
 Withstood: and so with ease it flies between
 And penetrates the narrow passages;
 'Tis not delayed by many obstacles,
 And therefore smoothly flies with swift attack.

ON THE NATURE OF THINGS

vi., 335-364.

And then again all weights still pressing down
By natural law, when comes a blow as well,
The speed is doubled, and the force so strong,
That yet more swiftly and with greater power
It dashes all aside that may obstruct,
And so pursues its way. And since it comes
From far away, its swiftness must increase,
It gathers strength in going, gets fresh power,
And strikes with greater vigour in the end.
Where'er its seeds are found, it gathers them
To a single place, and so collects them all
In one path as they roll. Perhaps as well
It gathers certain bodies from the air
Which by their blows increase its speed amain.
And many things there are it passes through
And leaves them safe, unharmed, as on it goes,
Pure liquid fire. But many it destroys,
When its component parts collide with theirs,
Where they are held together, intertwined:
Bronze it destroys, and gold it melts at once,
Because its strength resides in bodies small,
Its elements are light, and make their way
With ease, and so untie the knots and break
The bands of union. In autumn most,
When stars are shining bright, the vault of heaven
Is shaken and the earth as well, and when
The flowery days of spring come round again:
For in the cold the fire is absent still,
The winds lack heat, nor are the clouds so thick.
'Tis when the seasons stand, as 't were, midway,
The various causes of these bolts concur,
For then the narrow channel of the year
Through which one season passes to another,
Itself produces cold and heat, which both

T. LUCRETIUS CARUS

vi., 365-391.

Are needed in the making of the bolt,
 So that there be great discord, and the air
 May heave in vast disorder with the fire
 And wind. When heat commences and the cold
 Departs, we have the Spring, when things unlike
 Must fight together in wild turbulence.
 And then again when heat comes to an end,
 And cold returns, the Autumn it is called,
 Here, too, the bitter winter days conflict
 With those of summer. These are therefore
 termed

The narrow channels of the year where tides
 Do meet, and so it is not strange that then
 The bolts are many, and the troubled storm
 Is stirred in heaven, when the uncertain war
 Rages on every side, with flames on this,
 On that side wind and water joined in one.

The
 thunderbolt
 is no weapon
 of the Gods.

In this way you may read the nature clear
 Of the fire-laden bolt, and how it works,
 And not by idly turning back and forward
 Etruscan scrolls of antique origin,*
 To seek some indication of the will,
 The hidden will of Gods, to learn from whence
 The volant fire has come, or whither goes,
 How it has made its way through walls, and how
 Exultant has escaped, or what the harm
 The stroke from heaven may do. If Jove himself
 And his attendant Gods can even shake
 With sound terrific the bright vault above,
 And at their own sweet pleasure hurl the fire,
 Why strike they not those men who, heedless still,
 Have done some crime of all the world abhorred,

* Cicero, *De Div.*, i. 72, speaks of 'Etruscorum et haruspicum et fulgurantes et rituales libri.' The Etruscans wrote from left to right.

ON THE NATURE OF THINGS

vi., 392-417.

That so with breast transfix'd their very breath
May flames exhale, and they themselves remain
A bitter lesson to the world for aye?
And why is he who's conscious of no guilt,
All innocent, enveloped in the flames,
Caught up by fiery whirlwind from the sky?
Why do they seek deserted spots, and toil
In vain? Is it that then they brace their limbs
And teach their arms to fight? Why suffer they
The father's bolt to blunt itself on earth?
Why does he suffer it himself, and not
Reserve it for his foes? And why again
Does Jove not thunder, when the sky is clear,
And pour his bolts? Is it that when the clouds
Have gathered up, he then does enter them
To aim his weapon's blows from near at hand?
Why hurl it on the sea? What fault to find
With waves, the mass of water, and the fields
Of floating foam? And if he wish that we
Avoid the thunder-stroke, why not arrange
That we may see it sent? But if he would
Whelm us unwitting with his fire, why then
Thunder from whence we can avoid the blow?
Why, pray, such darkness, roarings, rumblings
round?
How can he hurl at many points at once?
Or would you dare to argue that he ne'er
Struck more than one blow at a time? Nay, oft
And oft it happens, as it needs must, rain
And showers fall in many places, so
It thunders too in many at a time.
And lastly, why destroy with threatening bolt
The sacred shrines of Gods, their bright abodes?
Why break their well-carved idols, and despoil

T. LUCRETIVS CARVS

vi., 418-447.

Their images of all their glorious fame
By violating blow? Why seek again
The lofty heights, why see we still the trace
Of fire most often on the mountain-tops?

Waterspouts
or presters.

For the rest 'tis easy now to understand
How what the Greeks named 'presters' from
above

Are sent down on the sea. Sometimes you know
A pillar, so to speak, is let right down
From sky to sea, round which the surges boil
Lashed by the blowing winds, and ships that are
Caught in that turmoil come in greatest risk.
And this takes place sometimes when the wind's
force

Can't burst the cloud it aimed at, but can urge
It downwards, like a pillar that is set
'Tween sea and sky, coming by slow degrees,
Pushed and extended as 't were from above
Over the waves by strength of arm and hand:
And when the cloud is rent, the force of wind
Bursts forth upon the sea, and raises up
A wondrous surging in the waves around:
The eddy whirling round descends and brings
Yon cloud of pliant body down with it:
And having thrust it, heavy as it is,
Down to the level of the sea, the eddy then
Plunges itself entire into the waves,
And stirs the ocean with terrific noise,
And makes it boil. It chanceth too sometimes
That the eddying wind wraps up itself in clouds,
And gathering from the air the seeds of clouds,
As though let down from heaven, imitates
The prester. And when it has reached the earth
And burst, it vomits forth a whirling storm

ON THE NATURE OF THINGS

vi., 448-480.

Of vast dimensions, but as it is rare,
And mountains must obstruct its way on land,
More frequent it is seen in the wide expanse
Of ocean and beneath the spreading sky.

Clouds.

Clouds gather when in heaven's upper space
Have met full many bodies and combined,
Quite suddenly, and of the rougher sort,
Such as, though linked by slightest holds, can yet
Be held together. First they form small clouds:
These join and mass, and as they do they grow
And by the winds are carried, till a storm
Is stirred. The nearer too the neighbouring tops
Of the hills to heaven are, so much the more
Thus raised they smoke with a black pall as 't were
Of swarthy cloud that never lifts: because
When first the clouds are formed, before the eye
Can see them, thin and rare, the winds take hold
And drive them to the mountain's highest tops.
And there when gathered in a greater mass
And now condensed they're visible, and seem
From the mountain's top to rise into the sky:
For facts, and our sensations when we climb
High hills, attest the presence of the wind.
Again, that nature many bodies takes
From the wide sea you learn from clothes hung up
Upon the shore, which gather moisture there,
So all the more to increase the bulk of clouds
Much may be gathered from the heaving sea,
The nature of the moisture being the same.
Again we see that mists and steam can rise
From rivers and the earth itself as well,
Which, as it were a breath, are carried up,
And flood the sky with darkness, and combine
To form the clouds on high: besides the heat

vi., 481-511.

Of the starry ether presses from above
 And thickening weaves a web of cloud
 Below the blue. And hither come as well
 From outside bodies which can form the clouds
 And flying rack: for I have shown before
 Their number is innumerable, the sum
 Of the vast profound is infinite, and how
 They fly with swiftness, and are wont to pass
 Quite suddenly through space unspeakable.
 No wonder then, if oft in little time
 The storm and darkness of the mighty clouds
 Cover the sea and land, and hang o'erhead,
 Since all around through all the passages
 Of ether, and the great world's breathing-holes
 The elements have leave to go and come.

Rain: and
 how it is
 caused.

Now I'll explain how rainy moisture comes
 In the high clouds, and then descends in showers
 Upon the earth. First I will prove to you
 That many seeds of water gather up
 Within the clouds themselves, that both the clouds
 And the water they contain increase together,
 Just as our bodies with the blood increase,
 And all the sweat and moisture they contain.
 Much moisture too they gather from the sea,
 It hangs suspended like a fleece of wool,
 When travelling o'er the main; and much beside
 Collects from rivers as they pass along,
 It rises to the clouds, and when the seeds
 Of moisture there have met in many ways,
 The plighted clouds* endeavour to discharge
 Their weight for double cause: and first because
 The wind drives them together, then because
 The weight of rain-clouds closely packed together

* Cf. Milton, *Comus*, 301: 'the plighted clouds.'

ON THE NATURE OF THINGS

vi., 512-538.

Urges them on, and presses and lets fall
The shower. Again, when that the clouds grow
thin

Through the action of the wind, and are dissolved,
Struck by the sun's heat, they discharge the rain
And drop it down just as you see the wax
Over warm heat soon melts and liquid grows.

The rain is heaviest, when on either side
The massèd clouds are pressed by force of wind:
It stays for long, and longest here delays
Where many seeds of water are called up,
When clouds on clouds and wetting racks are
borne

From every side, and steaming earth returns
Its moisture over all. In such a case
When 'midst the black storm there has shone the
sun

With all his rays against the dripping storm,
In the dark clouds a bow of light appears.*

Other
phenomena
can be
explained
by the same
theory.

As to the rest what grows and what is formed
By its own self, as well as those which wax
Within the clouds, all, all of them without
Exception, snow, winds, hail, and cold hoar frost
And the strong ice, the water's freezing power,
The block which makes the flowing rivers stand,
'Tis easy to discover, and in mind,
To see how all arose, and why, when once
You know the powers assigned the elements.

Earthquakes

Now know what reason can be said to be
For the quakings of the earth. Assume the earth
Below, above, is full of windswept caves,
And bears within it many lakes and chasms

* Cf. Milton, *Paradise Lost*, xi. 865:

'A dewy cloud and in the cloud a bow.'

And cliffs and craggy rocks, that many streams
 Beneath its crust roll on their rapid waves
 With stones submerged: the nature of the case
 Demands its structure everywhere 's alike.
 These then being underneath, and close attach'd,
 The earth, all shaken by the ruin made
 Where age has undermined the vasty caves,
 Trembles above: whole mountains tumble down,
 And with the shock the tremblings spread afar:
 And well they may, when buildings near a road
 Tremble throughout when shaken by a cart
 Of no great weight: nor do they rock the less
 When on the road a stone strikes up against
 The wheels with iron rims on either side.
 It happens, too, when in great yawning lakes
 A mass of soil displaced by age is rolled,
 The earth all shivering rocks with the great waves:
 Just as a vase cannot remain at rest
 Until the water in it cease to sway.

Again when wind collected through the caves*
 Of hollow earth is blowing from one side,
 And presses with great strength the caverns vast,
 The earth leans over as the wind inclines.
 Then every dwelling built above the ground,
 And all the more the nearer to the sky
 That it is raised, leans over and inclines
 In the same way, and beams dislodged hang o'er
 Ready to fall. And yet men shrink to believe

* Cf. Shakespeare, 1 *Henry IV.* iii. :

'Oft the teeming earth
 Is with a kind of colic pinched and vexed
 By the imprisonment of unruly wind
 Within her womb, which for enlargement striving
 Shakes the old beldam earth and topples down
 Steeples and moss-grown towers.'

ON THE NATURE OF THINGS

vi., 586-590.

That the great structure of the world is doomed
Some day to perish, and that ruin waits,
Although they see so great a mass of earth
Ready to fail. And if the winds did not
Abate, no force could rein things in,
Nor hold them, as to ruin on they go.
But as they now abate, and now increase,
Return and rally, and repulsed give way,
The earth more often threatens it will fall,
Than carries out the threat: it leans and then
Goes back, and after falling forward regains
Its place in equal poise. And this is why
The whole house rocks, the top more than the rest,
The middle than the centre, that below
Remains unshaken still amid the storm.

There is a further cause why earth thus quakes
When wind and some enormous force of air,
Or from without or in the earth itself,
Have flung upon the hollows of the earth,
And there with riot rage 'mid vasty caves,
And like a whirlwind are carried on,
After their force thus stirred and roused has burst,—
Abroad, it cleaves the mass of the deep earth
And makes a mighty chasm. Which happened once
In Syrian Sidon, and at Ægium *
In Peloponnese, which such onsets of wind,
With earthquake following after, once threw down.
And many walls have fallen thus on land,
And many towns subsided in the sea,
Their citizens as well. And ev'n if they

* Ægium, the chief town of Achaia. A memorable earthquake occurred there 372 B.C., which swallowed up two neighbouring towns, Helice and Bura. Ovid, *Metamorphoses*, xv. 293, says:

'Si quæris Helicen et Burin Achaiadas urbes
Invenies sub aquis.'

T. LUCRETII CARUS

vi., 591-616.

Do not find outlet, still the force of air
And violence of the wind make their way through
The numerous openings in the earth, and like
As with a shivering make it quake and rock.
Just as does cold when it invades our limbs
Right through, and sets them shivering quite
against

Their will, and makes them tremble. Men thus
fear

In cities with a double-edged alarm;
Above they tremble for the roofs; below
They dread lest nature by a stroke dissolve
The caverns of the earth, and torn in two
Display her gaping chasm, and in wild
Confusion seek to fill it with her wreck.
Yes, let them think, if so they will, that earth
And heaven will remain still undestroyed,
With guarantee of everlasting life:
Yet now and then the call of danger comes,
Applies to them the stimulus of fear,
Of fear lest earth withdrawn from 'neath their feet
Be carried to the pit below, that all
The universe undone may follow too,
The jumbled ruins of a world remain.

Why the sea
does not
increase

Men wonder that the sea does not increase
By natural laws, since there's so great a flood
Of water running down, and all the streams
Run into it. Add wandering showers of rain
And flying storms, which bathe and water both
The sea and land: add its own springs: and yet
They all when you compare them with the sum
Of all the sea will scarcely add to it
A single drop: so 'tis not strange the sea
Does not increase. Besides the sun draws off

ON THE NATURE OF THINGS

vi., 617-646.

Large quantities by heat: we often see
The sun with his bright rays completely dry
Clothes full of moisture. Many are the seas
And widely spread: and so however small
The moisture the sun takes from one set place,
Yet in so vast a space it must take much.
Then too, again, the winds that sweep the sea
Can much withdraw, since in a single night
We see the streets are dried by wind, and mud
Formed into lumps. Besides I've shown before
The clouds take up much moisture which they
draw

From the great surface of the sea, and then
Scatter it o'er the land on every side,
What time it rains, and winds bring up the clouds.
Lastly, since earth is porous, closely joined
To the sea-shores on every side, it must
As water flows from it into the sea
Receive some back again which filters through:
The salt is strained off: the water flows
Straight back again and fills the river heads
And then returns to earth in pleasant streams,
Where the cut channel with its liquid foot
Has long conveyed the fertilising wave.

Etna and
its eruption.

Now let me tell how 'tis through Etna's jaws
Such fiery blasts are seen from time to time:
For not with ordinary force arose
That flaming storm that wrecked Sicilian lands
And turned on them the neighbouring nation's
eyes,
Seeing all quarters of the sky to smoke
And flash with fire; care filled their trembling
hearts,
What fresh disaster nature had contrived.

The universe
is vast.

In these things you must look both far and deep,
And well consider upon every side
To recognise how vast, unfathomable,
This universe remains, to see how small
The part, how inconceivably minute,
The heaven is to the whole, ev'n less than is
One man to all the earth. If this you note,
And clearly understand, you will not think
Things are so strange as now they seem to be.
Does any of us wonder, if he has caught
A fever in his limbs with burning heat,
Or in his body some disease with pain?
His foot begins to swell, sharp pain attacks
His teeth, or else his eyes: the holy fire
Comes on and creeping burns whatever part
It first has seized and spreads o'er all the frame,
Because there are the seeds of many things,
And earth and heaven bring enough of ill
To provide for us immeasurable disease.
So then we must suppose that heaven and earth
Can be sufficiently supplied with all
From the infinite, to allow the earth
To shake and move quite suddenly, and let
The rapid whirlwind scour o'er sea and land,
Ætnean fires o'erflow, the heavens flame:
That too can happen, and high heaven's abodes
May burn with fire, and rainstorms gather strong,
When seeds of waters so dispose themselves.
'But too too great the fury of this fire,'
You say. Yes, but a river seems to him
Exceeding great, if he has never seen
A greater: so a tree, a man seem great,
And still the greatest things a man has seen
To him are still immense; and yet the whole

ON THE NATURE OF THINGS

vi., 678-709.

On heaven, on earth, on sea are nothing still
To all the things the universe contains.

The fires
of Etna.

And now I'll show, how 'tis that sudden fire
Roused up bursts forth from Etna's furnaces.
The mountain first is hollow, built upon
Basaltic caverns. In all caves you know
Is wind and air : wind comes when air is stirred.
This air when it is heated, and has given
Its furious heat to all the rocks around,
Where'er it reaches, and the Earth as well,
And has struck from them fire and burning flames,
It rises up and through the mountain's jaws
Bursts forth : and carries heat afar, and far
Scatters its ashes, and with darkness thick
Rolls forth its smoke, pouring out rocks the while
Of weight enormous : be not then in doubt
That 'tis the force, the stormy force of air.
Again the sea in great part breaks its waves
And draws its surge back at the mountain's roots,
And from this sea to the lofty mountain's jaws
Great caverns reach. Here water passes in :
And air is mingled with it, from the sea
It goes right in, and then comes out in blasts,
Lifts up the flame, and raises rocks on high,
And stirs up clouds of dust. At top there are
Craters so called, we call them jaws or mouths.

There are too things in which 'tis not enough
To assign one cause : but many there must be,
Yet one the chief : thus if perchance you see
A man's dead body lying from afar,
'T were right you mention every cause of death,
To reach the real cause in this one case.
Perhaps you prove he has not died by steel,
Or cold, or yet by poison or disease :

T. LUCRETIUS CARUS

vi., 710-737.

And yet we know 't was something of the kind,
And so it is in many other things.

The Nile.

The Nile in summer waxes large and floods
The plains, the only river Egypt has:
It waters Egypt, in the summer heat,
Perhaps because at that time the North winds
Blow straight against its mouth, the winds men
call

Etesian then. They blow right up against
The stream and so retard it: force its waves
Straight back, and cause it to remain quite full.
Undoubtedly these blasts, which first are formed
Among the chilly constellations of
The pole, are borne athwart the stream; while it
Comes from the heated regions of the South,
Rising 'mong men whose faces are burned black,
Far inland in the region of midday.
It may be too that the great heaps of sand
Piled up against the river at the mouth
May block it, when the sea driven on by winds
Throws up the sand within, whereby the course
Of the stream becomes less free, its downward flow
Less strong. It may be too that greater now
The rains are at its source, because the clouds
Are driven to those parts by the Etesian winds
Which blows from north. And thus it seems the
clouds

When driven towards the region of midday
They meet together, massed against the hills
Are there compacted and formed into one.
Perchance it rises deep among the hills
Of Ethiop-land, where the all-illumining sun
With melting rays that strike upon their sides
Forces the white snows down into the plain.

ON THE NATURE OF THINGS

vi., 738-764.

The
Avernian
lakes and
places.

And now I'll tell you of the Avernian* lakes
And places, what their nature is. Their name
Is given because they're noxious to all birds:
For when in flight they come upon these spots,
They fold their wings, forget their customary flight
And drop at once, their tender neck outstretched,
To earth, if the nature of the place permits,
To water, if the Avernian lake's below.
Such place there is by Cumæ, where the hills,
With acrid sulphur charged, smoke, still renewed
With heated springs. Another suchlike spot
Is 'mid the walls of Athens, at the top
Of its famed citadel, where stands the fane
Of the Tritonian Pallas, bountiful,
Which ne'er the croaking crows† approach on
wing,

Not even when the altars smoke on high
With sacred offerings; so far they fly
Not from the bitter wrath of Pallas, for
The watch they one day kept too well, as sing
The Grecian poets, but because enough
For them the nature of the place itself.
In Syria too there seems to be a place
In which as soon as ev'n four-footed beasts
Their steps have planted, heavily they fall
As on a sudden slain in sacrifice
To deities below. Yet all these things
To natural cause are due, their origin
Is clear enough, we need not think Hell's gate
Is there, or that the infernal deities
Draw souls below from hence to Acheron's shores,

* Avernian in its Greek form means 'birdless.'

† Cf. Ovid, *Metamorphoses*, ii. 542-565, for the story why Pallas banished crows from her temple.

vi., 765-795.

As stags of wingèd foot are often thought
By scent to drag from out their hiding-place
The savage serpent tribe. How far this is
From truth and facts I'll now attempt to tell.

Earth con-
tains all
things bad
and good.

First then, as I have often said before,
In earth are many elements, as some
Which are for food and vital, others too
Which bring disease, and even hasten death.
And we have seen before how some things are
More fitted for the purposes of life
To one, than to another living thing,
And this because their nature is unlike,
Their texture and their shape is different.
Much that is noxious passes through the ears,
Much through the nose that's dangerous and harsh,
And not a few we must avoid by touch,
Or fly at sight, or which our taste condemns.

Again you see how much there is that man
Finds noxious to his sense, and foul, and full
Of risk. Thus certain trees can cast a shade
So dangerous as to cause the head to ache,
If any lie below, prostrate on grass.
In Helicon's high hills there is a tree
That has been even known to kill a man
By its flower's noisome scent. And all these things
Rise from the earth, because it has many seeds
All mixed together, given out one by one.
A light at night when recently put out
Offends our nostrils by its bitter stench,
Yet puts to sleep at once the man who has
That fell disease that makes him fall and foam.
A heavy dose of castor puts to sleep,
And makes a woman fall, her fancy work
Slips from her tender hands at the very smell,

ON THE NATURE OF THINGS

vi., 796-825.

And more at certain seasons. Many things
There are which can relax the fainting limbs
And make the soul to weaken in its seat.
Thus if you linger long, when somewhat full,
In the hot baths, how apt you are to fall
When sitting 'mid the boiling water there
Within your tub. How easily the fumes
And dangerous force of charcoal reach the brain,
If we have not drunk water first. But when
With greater force it has filled the rooms within
The poison's odour gives a murderous blow ;
And see you not, how sulphur is contained
In the earth itself, and pitch assumes the form
Of lumps with noxious smell? And so again
In seeking veins of silver and of gold,
And searching with a pick the hidden parts
Of earth, what smells Scaptinsula * pours forth
From down below? what danger springs again
From mines of gold? What faces on the men,
And what complexions? See and hear you not
How short the time they live, how life soon fails
Who bear such toil of grim necessity?
Such exhalations then the earth steams forth,
And spreads abroad into the light of day.

And so it is
with these
Avernian
spots.

So these Avernian spots supply some force,
That's deadly to the birds, it rises up
To the air from out the ground, with poison
fraught

To some part of the sky, in such a way
That when a bird has reached it on its wings,
It stops arrested by the poison hid
Within the air, and falls just where it comes.
And when it falls, this force deprives its limbs

* Scaptinsula was a famous mine in Thrace. Cf. Herodotus
vi. 46.

T. LUCRETII CARUS

vi., 826-855.

Of all of life that's left: for first it brings
A sort of dizziness, but when they fall
To the very place from which the poison springs,
Then life itself they vomit forth, because
All round great store of poison still remains.

Sometimes this exhalation springing up
With force from out Avernus can dispel
The air, which lies between the birds and earth,
So that a void almost is left: and when
The birds have reached the spot, the buoyant force
Within their wings is crippled, all the power
Their pinions have departs on either side.
And when they can no longer buoy themselves
And lean upon their wings, to earth at once
They fall by natural weight, and lying dead,
In what is now a void, shed forth their soul
Through all their body's pores, and end their life.

Wells are
cold in
summer.

The water in a well is cooler far
In summer, since the earth through heat is then
More porous, and can send what seeds it has
Of heat above. And so the more it is
Drained of its heat, the colder does become
The moisture it contains. Again, when earth
Grows all compressed by frost, contracts, congeals,
It follows in the process it expels
Whatever heat it has into the wells.

The
fountain of
Hammon.

'Tis said near Hammon's temple is a spring
That's cold by day, and warm when night comes on.
This spring men wonder at, perhaps too much,
And think it boils by the influence of the sun
Below the earth, when night has hid us here
In dreary darkness. Very far from truth.
Why when the sun, touching the water there
That lies uncovered, cannot make it hot,

ON THE NATURE OF THINGS

vi., 856-886.

Although his beams possess such heat above,
How can he down below the earth so dense
There boil the water, fill it full of heat?
Still more when scarcely through our house's walls
Can he force heat to pass. What then's the cause?
Of course the earth is purer, has more warmth
Close to the spring, than what it has elsewhere,
And near the water there are many seeds
Of fire: and so when night has clad the earth
In robes of dewy darkness it at once
Contracts with chill and sponge-like squeezes out
Whatever seeds of fire it has within
Into the spring, which straightway makes it hot
To touch and taste. Then when the risen sun
Loosens the earth, makes it more full of pores,
As its warm heat increases, then the seeds
Of fire come back to where they were before,
And all the water's heat is in the earth.
And this is why the spring is cold by day.
Again, the sun's rays play upon the spring,
His throbbing heat the water makes more rare,
It sends out all the seeds of heat it has;
Just as it often sheds the frost it holds,
And thaws the ice, unbinds its bonds again.

Other cold
springs.

Another cold spring too there is, o'er which
A piece of tow when held casts forth a flame:
A pine torch, too, when lighted in this way
Sheds light upon the waves, where'er the wind
May drive it. Just because there are the seeds
Of fire full many in it, and from earth
Below must rise up many such-like seeds
Through the whole spring, and pass abroad in
 blasts,
And rise into the air, too few perhaps

vi., 887-919.

To make the spring grow hot: besides a force
 Compels them to burst forth all scattered wide,
 And later join in union up above.
 At Aradus there is a spring at sea,
 Which bubbles with fresh water, and keeps off
 The salt sea waves around: and often too
 The ocean helps the thirsty sailor still
 By pouring water fresh amid the salt.
 So therefore through that spring may well escape
 These seeds, and flow in this way to the tow:
 And when in it they meet, or in the torch,
 They easily light, because they both have seeds
 Of fire within themselves. And see you not
 When that you place a new-extinguished wick
 Beside a candle, it will light at once,
 Before it touch the flame: and the torch too?
 And many things likewise can light when touched
 Just by the heat, before they reach the flame:
 Thus therefore you must think it's with the spring.

The Magnet.

And next I will inquire what is the law
 By which iron is attracted by the stone
 The Greeks call Magnet, from its native place
 Being found within Magnesian bounds. At this
 Men wonder much, since oft it can produce
 A chain of rings suspended from itself.
 Five you may often see or more let down,
 In order play about in the light air,
 One hanging from another underneath,
 Each after each acknowledging the power
 And binding force residing in the stone:
 So constant is the force that flies through it.

Its difficulty.

How many points must first be made secure
 Ere you can understand the law: and it
 Must be approached in somewhat devious ways;

ON THE NATURE OF THINGS

vi., 920-950.

So I must ask attentive ear and mind.

Bodies flow
from all
things and
arrest our
sense.

And first of all from all things which we see
Must flow, and be discharged, and sent abroad
Bodies which strike the eye, arrest the sight.
From certain things too scents incessant stream
As cold from rivers, heat from sun, and spray
From off the waves, that eat sea walls away
Along the shore. Then various sounds ne'er cease
To stream through air. Again, when by the sea,
A moist salt flavour will be often found
Within the mouth, and when we watch absinthe
Being mixed, we feel its bitterness at once.
Thus then from all things something's carried off
In constant stream, and then discharged abroad:
There's no delay, no pause, perpetual flow,
Since we for ever feel, and ever can
See, smell, and hear the sound of everything.

Bodies are
porous.

Now I will state again, how all things have
A body infinitely rare: as is
Clear in my earlier verse: and though this fact
'Tis well to recognise for many things,
But most for this, of which I come to treat:
We must lay down that nought can be perceived
Save body and a void. In caves you know
Rocks ooze with moisture from above, and drip
With trickling drops: sweat oozes out as well
From our whole body, beard and hair can grow
O'er all our limbs and frame. Then through the
veins
Food is distributed, which nourishes
Parts of our body that are most removed,
And ev'n our nails. We feel too cold and heat
Can pass through brass, we feel it pass through
gold

T. LUCRETII CARUS

vi., 951-981.

And silver, when we hold a cup in hand :
 Lastly through stone-partitions of a house
 Voices can fly, and smell and cold and heat,
 Which pierce even iron ; as when the coat
 Of mail girds round the men of Gaul. And storms
 Gathered in earth and sky complete their work
 And then to sky and earth return : and so
 You feel disease when introduced without.
 Since there is nought but is of body rare.

These things
 flowing
 forth from
 all bodies
 affect us
 differently.

And further it is plain all things discharged
 From others, do not make the same appeal
 To our sensations, nor yet are they fit
 For everything alike. The sun bakes up
 And dries the earth, but melts the solid ice,
 And on the lofty hills bids piled-up snow
 Quite deep to disappear before his rays.
 And wax grows soft when placed within his heat.
 And fire melts brass and fuses gold : but hides
 And flesh it dries and shrivels up : and yet
 Water can harden iron that's been in fire,
 But hides and flesh it softens. Then the olive
 Delights the bearded she-goats, just as though
 It were ambrosial drink and nectar sweet :
 Yet nothing grows that bitterer is to man.
 The swine the marjoram avoids and fears
 To touch perfumes : to bristly swine they are
 A bitter poison, yet sometimes they seem
 To give us as it were fresh life. Yet mire
 To us is foulest filth, while to the swine
 It is so welcome that they wallow there
 With appetite insatiably strong.

The pores of
 things are
 different.

One point remains to speak of, ere I come
 To what must now be said. Since many pores
 To many things are given, they must have

ON THE NATURE OF THINGS

vi., 982-1015.

Natures unlike, and each to each its own,
Its own direction: for in living things
There still are various senses, which perceive
Each thing in its own way: for thus we see
Sounds pass one way, and in another taste
From savours, in a third the scent of smell.
One thing will stream through stones, another
wood,

Another gold, another still through brass
And silver; form is seen to pass in this,
And heat in that direction, and more swift
One goes than other, though the way's the same.
The various nature of the ways compels
It so to be, as I have shown before,
The nature and the texture differ still.

And now to
return to
the magnet.

And now that these things are made clear and set
As premisses before us for our use,
In what remains you'll easily see the plan,
The cause which can attract the force of iron.
And first of all from out this stone must stream
Seeds, or a current which dispels the air,
Lying between the stone and iron there.
Then when this space is empty, and much void
Is left between, at once the iron atoms
Fall headlong in the void in one great mass,
The ring then follows in its turn, and goes
With all its body. Nothing has its parts
So closely intermingled so in one,
As stubborn iron, with its cold, dreadful feel.
So 'tis not strange my saying from such things
There cannot gather many bodies from
The iron, and pass into the void, but that
The ring must follow them; and this it does,
It follows till it reaches to the stone

T. LUCRETIVS CARVS

vi., 1017-1044.

And clings to it by ways that are unseen.
And this takes place in all directions, where
A void is formed, whether athwart or from
Above, the neighbouring bodies straight are borne
Into the void: they are disturbed by blows
From other sources, nor of their own will
Can rise into the air. And then besides
(And this makes it more possible and is
A help and adjunct) as the air which lies
Before the ring is made more thin, and so
The space more void and empty, then the air
Which lies behind propels and forces on
The ring as though 't were lying just behind.
For air surrounding still beats on the things
That it surrounds: but still at such a time
That it can push the iron, inasmuch
As there's a space, which takes it to itself.
This air, of which I speak, then makes its way
Through the iron's pores so subtle as they are,
Into its smallest parts, then thrusts it on
And pushes, as the wind a ship with sails.
And lastly everything possesses air
Within itself, because their body's thin,
And air is spread around, surrounding all.
And so this air, thus hidden away in iron,
Is ever stirred by motion, and no doubt
Beats on the ring, and stirs it up within:
And then it's borne towards where it once has
plunged,
And to the space towards which it made a start.
Sometimes it happens that the iron recedes
When it meets the stone, and ev'n is wont to fly
And follow in its turn. For I have seen
Some iron rings in Samothrace jump up,

When brass
is interposed
the iron is
repelled.

ON THE NATURE OF THINGS

vi., 1045-1072.

And iron filings rage in bowls of brass,
The magnet stone being placed below: so strong
Was their desire to flee it. When the brass
Then comes between, so great discord ensues,
Because when the stream from it has seized upon
And blocked the iron's pores, then comes on it
The stream from out the stone, and finds all full
Within the iron, nor is there a path
By which to go, as heretofore it did.
So it must strike against it, with its wave
Must beat the iron's texture, and repel
It from itself, and through the brass thus drives
Away that which without it it absorbs.
And do not wonder that this stream which comes
From out this stone cannot impel as well
Quite other things; for some of these stand still
By their own weight: as gold: others because
They're of so rare a body that the stream
Goes through untouched, they can't be moved at
all:

And in this category you find wood.

Iron then in nature stands between the two,
And when it has received bodies of brass,
'Tis then the magnet causes it to move.

And yet these cases not so different are
From other things, but that I can supply
Full many others where you'll find things fit
Just for each other, and for naught beside:
You see that stones are joined by lime alone:
While wood requires bull's glue which sticks so
fast

That oft the veins of boards gape wide in cracks
Before the joints can loose their taurine chains.
The vine-born juice can mingle with the stream

T. LUCRETII CARUS

vi., 1073-1096.

But heavy pitch, light oil will not; the dye
The purple dye of shell-fish so unites
Itself with wool, it can't be put apart,
No, not if you should try with Neptune's waves
To make it new, or even if the sea
With all its waves should wish to wash it out.*
Again, is it not true one thing alone
Can fasten gold to gold? and brass to brass
Is joined by solder? And how many more
There could be found? What then? There needs
for you

No long uncertain paths, I need to take
No pains, save simply in a single word
To state the case. Those things whose textures
fall

The one upon another, so that those
Which hollow are, and others round and full,
Can fit each other, these will ever form
The closest union. Others yet there are
Hold fast together say by rings and hooks,
As with this stone and iron would seem the case.

Plagues and
diseases.

Now I proceed to take the law that guides
Diseases, and whence comes their deadly force
Which brings such fatal slaughter on the race
Of men and herds of cattle. I have taught
Before that many are the seeds of things
Essential to life; and many too
That fly about full of disease and death.
And these when they have gathered, and dis-
turbed

* Cf. Shakespeare, *Macbeth*, ii. 2:

'Will all great Neptune's ocean wash this blood
Clean from my hand? No, this my hand will rather
The multitudinous seas incarnadine.'

ON THE NATURE OF THINGS

vi., 1097-1121.

The sky, the air becomes quite deadly. All this
force

Of disease and pestilence falls from above,
From clouds and mists, or gathers strong and
comes

From out the earth, when it is soaked by wet,
And tainted 'neath the strokes of untimely storms
And suns. And see you not how those who come
From home and country far are often tried
By the strangeness of the climate and the rains
So different to their own? Just think how much
Does Britain's* climate differ, from that which
We find in Egypt where the world's axis
Halts in its course? Or yet in Pontus land,
And Cadiz, and where races of mankind
Live burned black by sun? Just as we see
Four different climates lying thus beneath
Four different winds and quarters of the sky,
So the complexion and the face of men
Do differ too, and varying disease
Attacks them each by each. Thus then there is
Elephantiasis which by the banks of Nile
Is found in Egypt, and is nowhere else.
In Attica disease attacks the feet, the eyes
In the Achæan land. And so one place
Has this disease; another that: the air,
The atmosphere arranges this. Thus where
It is unsuited to us, and the air
Is deadly, in the form of mist and cloud

* Cæsar first invaded Britain in 55 B.C.—just toward the close of Lucretius' life. Cicero about the same time, in his letters to Trebatius who was in the Expedition, expresses his interest in the country. He learns there is neither gold nor silver in it. The only things it produces are war chariots, and he advises his friend to capture one and come home in it.

vi., 1122-1146.

They come by slow degrees, disturbing all
 In their advance, and changing all around:
 And when our atmosphere is reached, it too
 Is rendered deadly, and just like their own,
 Unsited to us. Then there come on us
 New forms of death and pestilence, which fall
 Upon the water, or are in the crops,
 Or other food of man, and sustenance
 Of beasts; or else it stays suspended still
 In air, which when we breathe and suck it in,
 We absorb with it the germs which it contains.
 Just so on kine there often falls disease,
 And sickness on our lazy bleating sheep.
 No difference whether we should wander far
 To places fatal to us, and should seek
 To change the sky that covers us, or else
 Nature should bring to us an atmosphere
 So much unsited, or else something new
 We have not known before, which when it comes
 Attacks our frame as soon as it arrives.

Description
 of the
 plague at
 Athens.

Such form of malady,* such deadly plague
 In Cecrop's borders once made all the fields
 Full of the dead, wasted its ways of men,
 And robbed its cities of inhabitants.
 At its first rising coming from the shore
 Of Egypt, soon it covered a vast tract,
 Of sky and ocean's watery plains, and fixed
 Itself upon Pandion, there whole crowds
 Were handed over to disease and death.
 There first of all they found the head was seized
 With burning heat, their bloodshot eyes suffused

* This account of the plague at Athens is taken from Thucydides, ii. 47-54. Virgil, *Georgics*, iii. 478-566 and Ovid, *Metamorphoses*, vii. 523-613, have also given descriptions of it: the former applying it to murrain in herds.

ON THE NATURE OF THINGS

VL. 1147-1170.

With tears that dimmed the sight: the reddened
throat

Within was moist with blood, the vocal chords
Were choked with ulcers, and the interpreter
Of mind, the tongue, was oozing out with gore,
Weak from disease, heavy, and rough to touch.
When through the throat the evil reached the
chest,

And its destroying force had gathered sore
Upon the heart,* all sick with maladies,
Then all the bands of life became unloosed.
Their breath rolled from the mouth in foetid
streams,

As stinking corpses smell thrown out of doors,
The mind itself with all its power and force,
The body too, were languishing away
On death's dark threshold, anxious despair
Accompanied their intolerable ills
And sad complaints and groans. And night and day
Continual hiccup seizing sinews, frame,
Quite wore them out, for ever harassing
Their wearied bodies. Yet you could not see
The skin in any part inflamed with heat,
But rather lukewarm to the touch, and red
With ulcers burned all over as it is
In erysipelas. But still within
Hot to the very bones, the stomach too
Burned like a furnace. Nought was ever found
So light and thin† to serve as covering,

* The Greek word here used by Thucydides signifies the stomach, as well as the heart, or seat of life. Lucretius has therefore somewhat anticipated the course of the disease by assuming it was the heart that was attacked.

† Golding, in his translation of Ovid's *Metamorphoses*, has: 'No bed, no clothes, though nere so thinne, the paciente could abide.'

vi., 1171-1193.

But what they ever wanted was more wind
 And cold. And some to icy streams proceed
 To lave their bodies burning with disease,
 Casting themselves unclothed into the waves.
 And others fall headlong into the wells,
 Meeting the water with wide-opened mouth:
 And parching thirst that could not be appeased
 Whelming their very frame, made largest draughts
 Seem as 't were but a drop. No rest at all,
 Their wearied bodies lie. And medicine's art
 Mumbled a word in silent fear,* as they
 Kept rolling still their sleepless burning eyes:
 And many signs of death they did present,
 The mind disturbed at once with grief and fear,
 The heavy brow, the expression wild and fierce,
 The anxious ear still full of ringing sounds,
 The breathing quick, or laboured coming slow,
 Bright sweat upon the neck, the spittle thin
 And saffron-hued, and salt, scarce passing through
 The throat with coughing. In the hands the
 nerves

Were oft contracted, shivering seized the limbs,
 And cold crept always upwards from the feet†
 By sure degrees. When the last moment came
 Their nose was peaked, the tip was sharp, their
 eyes

Were sunk, their temples hollow, and their skin

* Virgil says of the veterinary surgeons who were consulted,
cf iii. 549: 'Cessere magistri.' Pope translates:

'The learned leeches in despair depart
 And shake their heads desponding of their art.'

† *Cf.* Shakespeare, *Henry V.* ii. 3: 'I put my hand into the bed
 and felt his feet: and they were as cold as any stone, and then I
 felt his knees and they were cold, and so upward and upward and
 all was as cold as any stone.'

ON THE NATURE OF THINGS

vi., 1194-1223.

Was hard and cold, a grin upon their mouth*
Grim all the while, their brow was tense and
swoll'n,

And not long after their still limbs were stretched
In death. On the eighth day of the sun's return,
At most upon the ninth, their life was gone.
Of whom if any there avoided death,
For him, with ulcers foul and black discharge,
There waited first decline, then death;
Or else with headache tainted blood would flow
From his gorged nostrils: and thus all his strength
And flesh too streamed away. And who escaped
This foul and acrid bloody flux, for him
Disease awaited in his frame and joints,
And sexual organs too: yet some there were
Dreading the gate of death preferred to live
Deprived of these, and even lived without
Their hands or feet, some lost their eyes as well:
So strong the fear of death within their mind.
And some could not remember anything
Nor even knew themselves. And though they lay
Unburied on the ground, corpse upon corpse,
The birds and wild beasts either kept away
To avoid the horrid stench, or where perchance
They tasted it, they met swift-following death.
Hardly at all did any bird appear,
The sullen wild beasts never left the woods.
Many drooped with disease, and died at once.
Even the faithful dog† stretched in the street

* Cf. Shakespeare, 2 *Henry VI.* iii. 3: 'See how the pangs of death do make him grin.'

And Milton, *Paradise Lost*, ii. 845:

'And death
Grinned horrible a ghastly smile.'

† Cf. Virgil, *Georgics*, iii. 496, has: 'Hinc canibus blandis rabie venit.'

vi., 1224-1245.

Laid down his life, with sorrow on his face,
 For the disease's fatal power would drag
 Their very life from them. And funerals
 Which none attended, and which none came near,
 Were hurried on in haste. No remedy
 Sure and of common use was found: for that
 Which gave to one the power to taste again
 The air of heaven, and gaze upon the sky,
 To others this was death, and served to wing
 The fatal dart. And sure at such a time
 More to be pitied, grievous beyond all
 It was when once a man perceived himself
 Enmeshed in fell disease, as though he were
 Condemned to death already, spirit gone,
 He lay with saddened heart, and looking death
 Right in the face surrendered life at once.*
 And then besides at no time did they cease
 One from another greedily to catch
 The foul contagion, like the woolly flocks
 And hornèd herds. And this it chiefly was
 Heaped death on death; for if one did refuse,
 Too keen of life, too timorous of death,
 To visit his own sick ones, 't was not long
 But he did suffer for it, meeting death
 Himself disgraceful, foul, and all alone
 Without a friend; such was the penalty
 Of cruel neglect for him: but those again
 Who stayed by them, contagion caught them quick,
 Assisted by the toil which duty forced
 Them there to undertake, while the gentle voice
 Of wearied sufferers, with its plaintive tones,

* Cf. Milton, *Paradise Lost*, xi. 489:

'Despair
 Tended the sick, busiest from couch to couch.'

ON THE NATURE OF THINGS

vi., 1246-1272.

Mingled with the complainings all around;
This was the death the worthiest sought to gain.
There they were one upon another still
Striving to bury crowds of those they'd known:
Then they returned all worn with tears and grief,
Took to their beds in sorrow, none were found
Whom nor disease nor death nor grief assailed,
At such a sad conjuncture of affairs.

The plague
extended to
the country
round.

And then besides the shepherd and the herd
And every hardy guider of the plough
Did sicken, and their bodies lay within
Their cottage huddled up and doomed to die
From poverty and sickness. Parents dead
Above their children's bodies you might see,
And then reversing this the children lie,
Fathers and mothers lying underneath,
When death arrived. The trouble largely too
Streamed from the country to the town, brought in
By crowds of sickening country folk, who came
From every part where was the plague: they filled
All places, every building: so the more
Death piled them up, thus crowded, in a heap,
Many induced by thirst, upon the street,
Their bodies just thrown down, would lie beside
The wells of water, and so lost their lives
By their too great indulgence in the stream:
And many in the place where people meet,
And in the streets you'd see their limbs drooped
down,
Half dead and foul with stench, with rags
o'erstrewn,
Dying of filth, just skin and bone, who were
Buried already in foul sores and dirt.
And all the holy temples of the Gods

vi., 1273-1286.

Death had filled up with lifeless carcases :
 And all the fanes where heavenly spirits dwell
 Stood full of corpses, for their keepers filled
 Them all with guests : religion then nor Gods
 Were much accounted of : their present grief
 Was all they thought of. All the burial rites,
 With which the custom was to be interred,
 Were intermitted : all was in dismay
 And trepidation : each one full of woe
 Buried his own, in sorrow as he could.
 The stress and the ensuing poverty
 Prompted to many deeds of shame, for then
 Some placed their own relations on the pyres
 For others built, with loud uproar, themselves
 Lighting the torches, wrangling still with strife
 That often led to blood, rather than leave
 The corpses that they loved unhouselled there.

APPENDIX I.

SOME MAXIMS OF EPICURUS.

Lucretius, at the beginning of his third book, says that—

‘As the bees

Sip all things in the flowery brakes, so we
From out the pages thou hast left behind,
Feed on your golden maxims, golden still,
And worthy to enjoy eternal life.’

The voluminous writings of the master have for the most part disappeared, but some fragments were found at Herculaneum in 1752, and others later in a town in Lycia, while others are given by Diogenes Laertius, who wrote A.D. 220, in the tenth book of his lives of the philosophers, which is devoted to Epicurus. Some samples of these I append to give an idea of the material out of which Lucretius fashioned his poem—

‘In sweet Pierian verse, smearing it o’er

With the sweet honey of the Muses’ song.’

‘First of all we must admit, that nothing can come of that which does not exist: for were the fact otherwise, then everything would be produced from everything, and there would be no need of any seed. And if that which disappeared were so absolutely destroyed as to become non-existent, then everything would soon perish, as the things

APPENDIX I.

into which they would be dissolved would have no existence. But in truth the universal whole always was such as it now is, and always will be such. For there is nothing into which it can change; for there is nothing beyond this universal whole, which can penetrate into it, and produce any change in it.'

Epicurus, 'Letter to Herodotus' (Diog. L.).

Compare Lucr. i. 150 seq.

'But again the worlds also are infinite, whether they resemble this one of ours, or are different from it. For as the atoms are infinite in number, as I have proved before, they necessarily move about at immense distances: for besides, this infinite multitude of atoms, of which the world is formed, could not be entirely absorbed by one single world, nor even by any worlds, the number of which was limited, whether we suppose them like this world of ours or different from it. There is, therefore, no fact inconsistent with an infinity of worlds.'

Epicurus (same letter).

Lucr. ii. 1067 seq.

'Accustom yourself to think that death has nothing to do with us, since every good and every evil depends on sensation, and death is the absence of sensation. Whence it comes that the true knowledge that death has nothing to do with us makes what is mortal in life really enjoyable, not because it adds to life immortality, but because it takes away our longing for immortality. For there is nothing which can terrify a man in life when he is assured that

APPENDIX I.

there is nothing terrible in the absence of life. So that he is a fool who tells us to fear death, not because its presence will torment us, but that its anticipation does so. For that which troubles us not when it is come, has but vain terrors when it is looked forward to. Death, then, the most awful of ills, is nothing in our eyes, for when we are death is not, and when death is we are not.'

Epicurus, 'Letter to Menæsius' (Diog. L.).

Compare Lucr. iii. 880 seq.

'It is not possible for a man who secretly does anything in contravention of the agreement which men have made with one another to guard against doing or sustaining mutual injury, to believe that he shall always escape, even if he have already done so ten thousand times; for till his death it is uncertain whether he will not be detected.'

Epicurus, 'Maxims' (Diog. L., ad fin.).

Compare Lucr. v. 1151, seq.

'If those things, which make the pleasure of debauched men, put an end to the fears of the mind, and to those which arise about the heavenly bodies and death and pain; and if they taught us what ought to be the limit of our desires, we should have no pretence for blaming those who wholly devote themselves to pleasure and who never feel any pain or grief from any quarter.

'The just man is the freest from disquietude of all men, but the unjust man is a perpetual prey to it.'

Epicurus, 'Maxims' (Diog. L., ad fin.).

Compare Lucr. v. 43, vi. 24 seq.

APPENDIX II.

FROM HOBBS' TRANSLATION OF THUCYDIDES, ii. 47-53.

'They had not beene many dayes in *Attica* when the Plague first began among the *Athenians*, said also to have seazed formerly on divers other parts, as about *Lemnos*, and elsewhere; but so great a Plague and mortality of men, was never remembred to have hapned in any place before. For at first, neither were the Physicians able to cure it, through ignorance of what it was, but dyed fastest, as being the men that most approached the sicke, nor any other Art of man availed whatsoever. All supplications to the *Gods*, and enquiries of *Oracles*, and whatsoever other means they used of that kind, proved all unprofitable, insomuch as subdued with the greatness of the evill, they gave them all over. It began (by report) first, in that part of *Æthiopia* that lyeth upon *Ægypt*, and thence fell downe into *Ægypt*, and *Africk*, and into the greatest part of the Territories of the *King*. It invaded *Athens* on a sudden, and touched first upon those that dwelt in *Piræus*; insomuch as they reported that the *Peloponnesians* had cast poyson into their Welles, for Springs there were not any in that place. But afterwards it came up into the high City, and then they dyed a great deale faster. Now let every man, Physician or other, concerning the ground of this

APPENDIX II.

Sicknesse, whence it sprung, and what causes hee thinkes able to produce so great an alteration, speake according to his owne knowledge, for my owne part, I will deliver but the manner of it, and lay open onely such things as one may take his Marke by, to discover the same if it come againe, having beene both sicke of it my selfe, and seene others sicke of the same. This yeere by confession of all men, was of all other, for other Diseases most free and healthfull. If any man were sicke before, his Diseases turned to this; if not, yet suddenly, without any apparent cause preceding, and being in perfect health, they were taken first with an extreame ache in their Heads, rednesse and inflammation of the Eyes; and then inwardly their Throats and Tongues grew presently bloody, and their Breath noysome and unsavoury. Upon this followed a sneezing and hoarsnesse, and not long after, the paine, together with a mighty Cough came downe into the Brest; and when once it was settled in the stomacke, it caused Vomit, and with great torment came up all manner of bilious purgation, that Physicians ever named. Most of them had also the Hickeyexe, which brought with it a strong Convulsion, and in some ceased quickly, but in others was long before it gave over. Their bodies outwardly to the touch, were neither very hote nor pale, but reddish livid, and beflowered with little Pimples and Whelkes; but so burned inwardly, as not to endure any the lightest cloathes or linnen garment to be upon them, nor any thing but meere nakedness; but rather most willingly to have cast themselves into the cold water. And many of them that were not looked to, possessed

APPENDIX II.

with insatiate thirst, ranne into the Welles, and to drinke much or little was indifferent, being still from ease, and power to sleep, as farre as ever. As long as the Disease was at the height, their bodies wasted not, but resisted the torment beyond all expectation, insomuch as the most of them either dyed of their inward burning, in nine or seven days, whilst they had yet strength, or if they escaped that, then the disease falling downe into their Bellies, and causing there great exulcerations and immoderate loosenesse, they dyed many of them afterwards through weaknesse. For the disease (which tooke first the head) began above and came down, and passed through the whole body; and he that overcame the worst of it was yet marked with the losse of his extreame parts; for breaking out both at their privy members, and at their fingers and toes, many with the losse of these escaped. There were also some that lost their eyes, and many that presently upon their recovery, were taken with such an oblivion of all things whatsoever, as they neither knew themselves, nor their acquaintance. For this was a kind of Sickness which farre surmounted all expression of words, and both exceeded humane nature, in the cruelty wherewith it handled each one, and appeared also otherwise to be none of those diseases that are bred amongst us, and that especially by this. For all, both Birds and Beasts, that use to feed on humane flesh, though many men lay abroad unburied, either came not at them, or tasting perished. An argument whereof as touching the Birds, is the manifest defect of such Fowle, which were not then seene, neither about the

APPENDIX II.

Carcasses, or anywhere else: But by the Dogges, because they are familiar with men, this effect was seene much clearer. So that this Disease (to passe over many strange particulars of the accidents that some had differently from others) was in general such as I have showne, and for other usual Sickneses, at that time no man was troubled with any. Now they dyed some for want of attendance, and some again with all the care and Physicke that could be used. Nor was there any to say, certaine Medicine, that applied must have helped them; for if it did good to one, it did harme to another; nor any difference of body, for strength or weaknesse that was able to resist it; but it carried all away, what Physicke soever was administred. But the greatest misery of all was, the dejection of mind, in such as found themselves beginning to be sicke (for they grew presently desperate, and gave themselves over without making any resistance) as also their dying thus like Sheepe, infected by mutuall Visitation, for the greatest Mortality proceeded that way. For if men forbore to visite them, for feare; then they dyed forlorne, whereby many Families became empty, for want of such as should take care of them. If they forbore not, then they died themselves, and principally the honestest men. For out of shame they would not spare themselves, but went in unto their Friends, especially after it was come to this passe, that even their Domestiques, wearied with the lamentations of them that died, and overcome with the greatnesse of the calamity, were no longer moved therewith. But those that were recovered, had much compassion on them that died, and on them that lay sick, as having

APPENDIX II.

both knowne the misery themselves, and now no more subject to the danger. For this disease never took any man the second time, so as to be mortall. And these men were both by others counted happy, and they also themselves, through excess of present joy, conceived a kind of light hope never to die of any other Sicknesse hereafter. Besides the present affliction, the reception of the Countrey people and of their substance into the Citie, oppressed both them, and much more the people themselves that so came in. For having no Houses, but dwelling at that time of the Year in stifling Boothes, the Mortality was now without all forme; and dying men lay tumbling one upon another in the Streetes, and men halfe dead about every Conduit through desire of Water. The Temples also where they dwelt in Tents, were all full of the dead that died within them; for oppressed with the violence of the Calamity, and not knowing what to doe, men grew carelesse, both of holy and prophane things alike. And the Lawes which they formerly used touching Funerals, were all now broken; every one burying where he could finde roome. And many for want of things necessary, after so many deathes before, were forced to become impudent in the Funerals of their Friends. For when one had made a Funeral Pile, another geting before him, would throw on his dead and give it fire. And when one was in burning, another would come, and having cast thereon him whom he carried, go his way again. And the great licentiousnesse, which also in other kindes was used in the Citie, began at first from this disease. For that which a man before would dissemble, and not acknowledge to be done

APPENDIX II.

for voluptuousnesse, he durst now doe freely, seeing before his eyes such quicke revolution, of the rich dying, and men worth nothing inheriting their Estates; in so much as they justified a speedy fruition of their goods, even for their pleasure, as men that thought they held their lives but by the day. As for paines, no man was forward in any action of honour to take any, because they thought it uncertaine whether they should dye or not, before they atchieved it. But what any man knew to bee delightful, and to be profitable to pleasure, that was made both profitable and honourable. Neither the feare of the Gods, nor Lawes of men, awed any man. Not the former, because they concluded it was alike to worship or not worship, from seeing that alike they all perished: nor the latter, because no man expected that lives would last, till he received punishment of his crimes by judgment. But they thought there was now over their heads, some farre greater judgment decreed against them; before which fell, they thought to enjoy some little part of their lives.'

14 DAY USE
RETURN TO DESK FROM WHICH BORROWED

LOAN DEPT.

This book is due on the last date stamped below, or
on the date to which renewed.

Renewed books are subject to immediate recall. C

25 Sep '65 WC

12 Mar '62 MW

REC'D LD

MAR 2 1962

REC'D LD

OCT 4 '65 -12.M

7 Aug 62 BB

MAR - 9 1966 69

REC'D LD

REC'D LD

JUL 28 1962

MAR 7 '66 -4 PM

16 May '64 SB

REC'D

LIBRARY USE ONLY

AUG 14 1991

MAY 16 04

CIRCULATION DEPT.

REC CIRC AUG 14 1991

A-50m-8, '61
5s10)476B

General Library
University of California
Berkeley

718439

PA6483

E2A5

1919

THE UNIVERSITY OF CALIFORNIA LIBRARY

